

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Revision date: 08/08/2022 Supersedes version of: 25/03/2021 Version: 10.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance Name : Acetone EC Index-No. : 606-001-00-8 EC-No. : 200-662-2 CAS-No. : 67-64-1

REACH registration No : 01-2119471330-49-0010

Formula : C3H6O

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : Manufacture, processing and distribution of substances and mixtures

> Use in laboratories Uses in Coatings

Use as binders and release agents Rubber production and processing

Polymer manufacturing Use in polymer processing Use in Cleaning Agents

Use in Oil and Gas field drilling and production operations

Use in blowing agents Use in mining chemicals

Cosmetic application only for premium acetone grade

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

NOVAPEX SAS

Usine de Roussillon - Rue Gaston Monmousseau ROUSSILLON 38556 SAINT MAURICE L'EXIL Cédex

FRANCE

T +33 4 74 11 38 50 - F +33 4 74 11 39 00 fds-novapex@seqens.com - www.seqens.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
France	Standard Plateforme Chimique de Roussillon	38556 St Maurice l'Exil Cédex	+33 4 74 11 37 00	
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
Malta	Medicines & Poisons Info Office	Mater Dei Hospital MSD 2090 Msida	+356 2545 6508	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

 Flam. Liq. 2
 H225

 Eye Irrit. 2
 H319

 STOT SE 3
 H336

Full text of hazard classes, H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. Causes serious eye irritation. May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)





GHS02

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P243 - Take precautionary measures against static discharge.

 ${\tt P305+P351+P338-IF\ IN\ EYES: Rinse\ cautiously\ with\ water\ for\ several\ minutes.\ Remove}$

contact lenses, if present and easy to do. Continue rinsing. P403+P235 - Store in a well-ventilated place. Keep cool. P312 - Call a POISON CENTER if you feel unwell.

EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Other hazards which do not result in classification : Narcotic effect.

This substance does not meet the PBT criteria of REACH regulation, annex XIII This substance does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acetone	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330- 49-0010	100	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066

08/08/2022 (Revision date) IE - en 2/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. Keep

victim warm and rested. If the victim is unconscious: Place the victim in the recovery position. Call a doctor immediately, even if there are no immediate symptoms. If breathing

stops, give artificial respiration.

First-aid measures after skin contact : Remove all contaminated clothing and footwear. Wash with soapy water. In case of redness

or irritation, call a doctor.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes

minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If irritation

persists, consult an eye specialist.

First-aid measures after ingestion : Rinse mouth out with water. Never

: Rinse mouth out with water. Never attempt to induce vomiting. Keep at rest. Get medical advice/attention. If possible show this sheet, if not available show packaging or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Headache. Nausea. Loss of consciousness.

4.3. Indication of any immediate medical attention and special treatment needed

Combat acidosis. Monitor alkali reserves. Monitor breathing. If not breathing, give artificial respiration. Risk of lung oedema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Carbon dioxide (CO2). Foam. Polyvalent foam.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour. Vapour mixes readily with air, forming explosive

mixtures. During combustion: Toxic fumes may be released. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Precautionary measures fire : Cool down the containers exposed to heat with a water spray. Contain the extinguishing

fluids by bunding.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

Other information : Temperature class : T1 (DIN 57165). Gas group : II A (DIN 57165). Fire class : B.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes. Do not breathe vapours. In case of important spillage : Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

08/08/2022 (Revision date) IE - en 3/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.2. Environmental precautions

Contain the spilled material by bunding. Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

For containment : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite, kieselguhr,

powdered limestone.

Methods for cleaning up : Wash non-recoverable remainder with large amounts of water.

Other information : Dispose of contaminated materials in accordance with current regulations.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not

breathe vapours. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source. Ground/bond container and receiving equipment. Avoid the build-up of electrostatic charge. Prevent unauthorised access. Do not smoke. Use only non-

sparking tools.

Hygiene measures : Do not drink, eat or smoke in the workplace. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Take all necessary measures to avoid accidental discharge of products into drains and

waterways due to the rupture of containers or transfer systems.

Storage conditions : Keep container tightly closed and dry. Protect from heat and direct sunlight. Keep away

from ignition sources. Avoid the build-up of electrostatic charge.

Incompatible products : Strong oxidizing agents.

Incompatible materials : Some plastics.

Special rules on packaging : Store always product in container of same material as original container.

Packaging materials : Iron or steel.

7.3. Specific end use(s)

Solvent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Acetone (67-64-1)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Acetone	
IOEL TWA	1210 mg/m³	
IOEL TWA [ppm]	500 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Ireland - Occupational Exposure Limits		
Local name	Acetone	
OEL TWA [1]	1210 mg/m³	
OEL TWA [2]	500 ppm	
OEL STEL	1050 mg/m³	

08/08/2022 (Revision date) IE - en 4/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Acetone (67-64-1)			
OEL STEL [ppm]	200 ppm		
Remark	IOELV (Indicative Occupational Exposure Limit Values)		
Regulatory reference	Chemical Agents Code of Practice 2021		
Ireland - Biological limit values	Ireland - Biological limit values		
Local name	Acetone		
BLV	50 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift - Notations: Ns (Non-specific)		
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)		
Malta - Occupational Exposure Limits			
Local name	Acetone		
OEL TWA	1210 mg/m³		
OEL TWA [ppm]	500 ppm		
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.356 of 2021)		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Acetone (67-64-1)			
DNEL/DMEL (Workers)			
Acute - local effects, inhalation	2420 mg/m³		
Long-term - systemic effects, dermal	186 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	1210 mg/m³		
DNEL/DMEL (General population)			
Long-term - systemic effects,oral	62 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	200 mg/m ³		
Long-term - systemic effects, dermal	62 mg/kg bodyweight/day		
PNEC (Water)	PNEC (Water)		
PNEC aqua (freshwater)	10.6 mg/l		
PNEC aqua (marine water)	1.06 mg/l		
PNEC aqua (intermittent, freshwater)	21 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	30.4 mg/kg		
PNEC sediment (marine water)	3.04 mg/kg		
PNEC (Soil)			
PNEC soil	29.5 mg/kg		
PNEC (STP)			
PNEC sewage treatment plant	100 mg/l		

8.1.5. Control banding

No additional information available

08/08/2022 (Revision date) IE - en 5/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Face-shield. (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Protective clothing. Antistatic clothing. Safety foot-wear (EN 345-347)

Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Butyl-rubber protective gloves. Breakthrough time (min): > 480. Layer thickness: >= 0,5 mm

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Gas mask with filter type A X (EN 371)

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Colour : Colourless.

Appearance : Fluid.

Molecular mass : 58.08 g/mol

Odour : Aromatic.

Odour threshold : 13 ppm

47.5 mg/m³

Melting point : -95 °C

Freezing point : Not available

Boiling point : 56 °C

Flammability : Not applicable.

No data available

Explosive properties : No data available.

Explosive limits : 2.15 – 13 vol %

Lower explosion limit : Not available

Upper explosion limit : Not available

Flash point : -18 °C (Closed cup)
Auto-ignition temperature : 538 °C
Decomposition temperature : 235 °C
pH : Not available
Viscosity, kinematic : Not applicable.

Viscosity, kinematic : Not applicable.
Viscosity, dynamic : 0.33 mPa.s (20°C)
Solubility : Water: Soluble

Organic solvent: Miscible in all proportions

Partition coefficient n-octanol/water (Log Kow) : Not available
Partition coefficient n-octanol/water (Log Pow) : -0.24 (20°C)
Vapour pressure : 26.7 kPa (22,7°C)

08/08/2022 (Revision date) IE - en 6/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

: 2 Relative vapour density at 20 °C : Not applicable. Particle size Particle size distribution : Not applicable. : Not applicable. Particle shape Particle aspect ratio : Not applicable. : Not applicable. Particle aggregation state Particle agglomeration state : Not applicable. Particle specific surface area : Not applicable. Particle dustiness : Not applicable.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Minimum ignition energy : 1.15 mJ
Relative evaporation rate (butylacetate=1) : 5.6
Relative evaporation rate (ether=1) : 2

SECTION 10: Stability and reactivity

10.1. Reactivity

To our knowledge, the product does not present any particular risk. Reacts with (some) bases.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

On exposure to high temperature, may decompose, releasing toxic gases.

10.4. Conditions to avoid

High temperature. No flames, no sparks. Eliminate all sources of ignition. Avoid the build-up of electrostatic charge.

10.5. Incompatible materials

Reacts violently with: Sulfonitric mixture. Chromic acid. Potassium permanganate. Peroxides. halogenated hydrocarbons. Reacts with: Nitric acid. Sodium hydroxide. Potassium hydroxide. Strong oxidizing agents. Attacks some forms of plastics, rubber, and coatings.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

Additional information : On ingestion :

Can occur: gastrointestinal disturbance

Acetone (67-64-1)

LD50 oral rat 5800 mg/kg (OECD 401 method)

08/08/2022 (Revision date) IE - en 7/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Acetone (67-64-1)	
LD50 dermal rat	> 15800 mg/kg
LC50 inhalation rat	76 mg/l/4h
Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation Germ cell mutagenicity Additional information Carcinogenicity Reproductive toxicity Additional information STOT-single exposure STOT-repeated exposure Additional information Aspiration hazard	 : Not classified (Based on available data, the classification criteria are not met) : Causes serious eye irritation. : Not classified (Based on available data, the classification criteria are not met) : Not classified (Based on available data, the classification criteria are not met) : Not mutagenic (OECD 471, 473 & 476) : Not classified (Based on available data, the classification criteria are not met) : Not classified (Based on available data, the classification criteria are not met) : No observed effects (OECD 414) : May cause drowsiness or dizziness. : Not classified (Based on available data, the classification criteria are not met) : Repeated exposure may cause skin dryness or cracking. : Not classified (Based on available data, the classification criteria are not met)
Acetone (67-64-1)	
Viscosity, kinematic	Not applicable.

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term

: Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term (chronic)

: Not classified (Based on available data, the classification criteria are not met)

Acetone (67-64-1)	
LC50 fish	

LC50 fish	5540 mg/l/96h (Lepomis macrochirus)
LC50 other aquatic organisms	11000 mg/l/96h (Alburnus alburnus)
EC50 Daphnia	8800 mg/l/48 h (Daphnia pulex)
LC 50 (Earthworm)	0.1 – 1 μg/cm³ (Eisenia fetida, 48h)
EC50 other aquatic organisms	20000 mg/l/48 h (Ambystoma mexicanum)
NOEC (acute)	530 mg/l (Microcystis aeruginosa, 8h)
NOEC (chronic)	2212 mg/l (Daphnia pulex, 28 d)

12.2. Persistence and degradability

Acetone (67-64-1)	
Persistence and degradability	Readily biodegradable. 91 % biodegradation. / 28 days.
Chemical oxygen demand (COD)	2.21 g O2/g substance

12.3. Bioaccumulative potential

Acetone (67-64-1)		
BCF	3 (calculated value)	
Partition coefficient n-octanol/water (Log Pow)	-0.24 (20°C)	

08/08/2022 (Revision date) IE - en 8/265

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Acetone (67-64-1)	
Bioaccumulative potential	Bioaccumulation unlikely.

12.4. Mobility in soil

Acetone (67-64-1)		
Mobility in soil	Very mobile	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.17 (20 °C)	
Ecology - soil	Slightly volatile (H=2929-3070 Pa.m3/mol - 25 °C).	

12.5. Results of PBT and vPvB assessment

Acetone (67-64-1)

This substance does not meet the PBT criteria of REACH regulation, annex XIII

This substance does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of in accordance with relevant local regulations. Incinerate at a licensed installation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA ADN		RID
14.1. UN number or ID n	umber			
UN 1090	UN 1090	UN 1090	UN 1090	UN 1090
14.2. UN proper shippin	g name			
ACETONE	ACETONE	Acetone	ACETONE	ACETONE
14.3. Transport hazard	class(es)			
3	3	3	3	3
3	3	3	3	3
14.4. Packing group				
II	II	II	II	II

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.5. Environmental haz	ards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1

(ADR)

Tank code (ADR): LGBFVehicle for tank carriage: FLTransport category (ADR): 2Special provisions for carriage - Operation (ADR): S2, S20

Hazard identification number (Kemler No.) : 33
Orange plates :

33 1090

Tunnel restriction code (ADR) : D/E

Transport by sea

Limited quantities (IMDG) : 1 L : E2 Excepted quantities (IMDG) : P001 Packing instructions (IMDG) IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP1 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-D Stowage category (IMDG) : E MFAG-No : 127

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) : 364 : 60L CAO max net quantity (IATA) ERG code (IATA) : 3H

Inland waterway transport

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 1

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1

(RID)

Tank codes for RID tanks (RID): LGBFTransport category (RID): 2Colis express (express parcels) (RID): CE7Hazard identification number (RID): 33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Acetone is not on the REACH Candidate List

Acetone is not on the REACH Annex XIV List

Acetone is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

Acetone is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

This sheet was updated (refer to the date at the top of this page). SDS changed sections: 2, 12.

Data sources : CSR (Chemical safety report).

Full text of H- and EUH-statements:				
EUH066	Repeated exposure may cause skin dryness or cracking.			
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2				

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:				
Flam. Liq. 2	lammable liquids, Category 2			
H225	ighly flammable liquid and vapour.			
H319	Causes serious eye irritation.			
H336	May cause drowsiness or dizziness.			
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis			

SEQENS - SDS UE 2021

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ANNEX TO THE SAFETY DATA SHEET

Identified Uses	Es N°	Short title	Page
Formulation and (re)packaging	1		14
Use as an intermediate	2		32
Use as solvent during synthesis of chemicals, processing not covered otherwise	3		34
Use in laboratories	4		36
Uses in Coatings	5		43
Use as binders and release agents	6		61
Use in rubber production and processing	7		77
Polymer manufacturing	8		95
Use in polymer processing	9		112
Use in Cleaning Agents	10		114
Oil field well drilling and production operations	11		130
Blowing agent	12		137
Use in mining chemicals	13		143
Use in laboratories	14		151
Uses in Coatings	15		157
Use as binders and release agents	16		174
Polymer manufacturing	17		190
Use in polymer processing	18		200
Use in Cleaning Agents	19		210
Oil field well drilling and production operations	20		225
Use in Agrochemicals	21		230
Use in de-icing and anti-icing fluids	22		244
Explosives manufacture and use	23		248
Consumer use	24		252

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

1. AC SE01: Formulation and (re)packaging

1. Title section					
Formulation and (re)packaging		ES Ref.: A ES Type		Association ref code: I	
Environment					
CS 1	Formulation and (re)packaging		ERC2		
Worker	(// 3 3				
CS 2	Chemical production or refinery likelihood of exposure or process containment conditions; Storage	ses with equivalent	PROC1		
CS 3	Chemical production or refinery process with occasional controll with equivalent containment con	ed exposure or processes	PROC2		
CS 4	Manufacture or formulation in the closed batch processes with occessors with equipart of the condition	casional controlled	PROC3		
CS 5	Chemical production where opporarises	ortunity for exposure	PROC4		
CS 6	Mixing operations (open systems	s)	PROC5		
CS 7	Mixing operations (open systems	s)	PROC5		
CS 8	Mixing operations (open systems	s)	PROC5		
CS 9	Mixing operations (open systems	s)	PROC5		
CS 10	Calendering (including Banburys	s)	PROC6		
CS 11	Calendering (including Banburys	s)	PROC6		
CS 12	Calendering (including Banburys	s)	PROC6		
CS 13	Calendering (including Banburys	s)	PROC6		
CS 14	Transfer of substance or mixture discharging) at non-dedicated fa	e (charging and	PROC8a		
CS 15		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 16		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 17	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a		
CS 18	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a		
CS 19	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b		
CS 20	Transfer of substance or mixture (dedicated filling line, including v		PROC9		
CS 21	Roller application or brushing		PROC10		
CS 22	Roller application or brushing		PROC10		
CS 23	Roller application or brushing		PROC10		
CS 24	Roller application or brushing		PROC10		
CS 25	Treatment of articles by dipping	and pouring	PROC13		
CS 26	Treatment of articles by dipping		PROC13		
CS 27	Treatment of articles by dipping	and pouring	PROC13		
CS 28	Treatment of articles by dipping	and pouring	PROC13		
CS 29	Tabletting, compression, extrusion granulation	Tabletting, compression, extrusion, pelettisation, granulation			
CS 30	Tabletting, compression, extrusion		PROC14		
CS 31	Tabletting, compression, extrusion		PROC14		
CS 32	Tabletting, compression, extrusion granulation	on, pelettisation,	PROC14		
CS 33	Laboratory activities		PROC15		
CS 34	Equipment cleaning and mainter	nance	PROC8a, PROC28		

PROC1

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CS 35	Equipment cleaning and maintenance	PROC8a, PROC28		
CS 36	Equipment cleaning and maintenance	PROC8a, PROC28		
CS 37	Equipment cleaning and maintenance	PROC8a, PROC28		
Processes, tasks, activities covered Use at industrial sites (IS)				

1.2. Conditions of use affecting exposure

1.2.1. Control of environmental exposure: Formulation and (re)packaging (ERC2)

1.2.1. Control of Children	ar oxpoduror r ormalation t	and (10)pathaging (Littor)			
ERC2	Formulation into mixture				
Amount used, frequency and duration of use (or from service life)					
Daily amount per site		≤ 33.3 t/d			
Annual site tonnage (tons/year):		≤ 10000 t/yr			
Conditions and measures related to sewage treatment plant					
Assumed domestic sewage treatment plant flow		≥ 2000 m³/d			
Sludge treatment technique :		Controlled application to agricultural soil			
Conditions and measures related to treatment of waste (including article waste)					
Dispose of waste in accordate legislation	nce with environmental				

1.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions; Storage (PROC1)

	containment conditions	,	•		•	•	,	
Product (article) characteristics								
Physical form of product		Liquid						
Concentration of substance in product		≤ 100 %						
Amount used (or contained in articles), frequency and duration of use/exposure								
Exposure duration		≤ 8 h/day						

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent

Technical and organisational conditions and measures

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

indoor,and/or,Outdoor

Maximum process temperature ≤ 320 °C

1.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions	
--	--

Product (article) characteristics			
Physical form of product	Liquid		
Concentration of substance in product	≤ 100 %		

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

indoor,and/or,Outdoor

Maximum process temperature ≤ 320 °C

1.2.4. Control of worker exposure: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition

Product (article) characteristics

Physical form of product Liquid

08/08/2022 (Revision date) IE - en 15/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency and	duration of use/exposure	
	≤ 8 h/day	
Technical and organisational conditions and measures	s	
Use in closed batch process (synthesis or formulation). Wi		
Supervision in place to check that the risk management me	<u>'</u>	
correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 320 °C
2.5. Control of worker exposure: Chemical production v		es (PROC4)
PROC4 Chemical production where	opportunity for exposure arises	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency and	duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measures	s	
Supervision in place to check that the risk management me	easures in place are being used	
correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 320 °C
2.6. Control of worker exposure: Mixing operations (ope		
PROC5 Mixing or blending in batch p	processes	
Product (article) characteristics		
	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency and	duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measures	s	
Provide a good standard of general ventilation (not less that	an 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		90 %
Supervision in place to check that the risk management me correctly and operation conditions followed.	easures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 320 °C
2.7. Control of worker exposure: Mixing operations (ope	en systems) (PROC5)	
PROC5 Mixing or blending in batch p	processes	
Product (article) characteristics		
	Liquid	
	≤ 100 %	
Concentration of substance in product	≤ 100 %	
Concentration of substance in product Amount used (or contained in articles), frequency and	≤ 100 % duration of use/exposure	
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration	≤ 100 % duration of use/exposure ≤ 8 h/day	
Concentration of substance in product Amount used (or contained in articles), frequency and	≤ 100 % duration of use/exposure ≤ 8 h/day s	30 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measures	≤ 100 % duration of use/exposure ≤ 8 h/day s an 3 to 5 air changes per hour).	30 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measures Provide a good standard of general ventilation (not less the Efficiency	≤ 100 % duration of use/exposure ≤ 8 h/day s an 3 to 5 air changes per hour).	30 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measures Provide a good standard of general ventilation (not less the Efficiency Supervision in place to check that the risk management mecorrectly and operation conditions followed. Other conditions affecting workers exposure	≤ 100 % duration of use/exposure ≤ 8 h/day s an 3 to 5 air changes per hour).	30 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measures Provide a good standard of general ventilation (not less the Efficiency Supervision in place to check that the risk management me correctly and operation conditions followed.	≤ 100 % duration of use/exposure ≤ 8 h/day s an 3 to 5 air changes per hour).	30 % ≤ 320 °C

08/08/2022 (Revision date) IE - en 16/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

2.0. Control of Worker exposure. Mixing operations (c	pen systems) (PROC5)	
PROC5 Mixing or blending in batch	n processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	· ≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur		
Supervision in place to check that the risk management		
correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.9. Control of worker exposure: Mixing operations (o	pen systems) (PROC5)	
PROC5 Mixing or blending in batch	n processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	200	
Supervision in place to check that the risk management correctly and operation conditions followed.		
Conditions and measures related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):		90 %
		(APF 10)
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 320 °C
.2.10. Control of worker exposure: Calendering (includ	ling Banburys) (PROC6)	
PROC6 Calendering operations		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Concentration of substance in product		
Concentration of substance in product Amount used (or contained in articles), frequency and	d duration of use/exposure ≤ 8 h/day	
Concentration of substance in product Amount used (or contained in articles), frequency an Exposure duration	d duration of use/exposure ≤ 8 h/day	
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	90 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of the content of the	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	90 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed.	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	90 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	90 %
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	90 % ≤ 320 °C
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used	
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used	
Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.111. Control of worker exposure: Calendering (include PROC6)	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used	
Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.11. Control of worker exposure: Calendering (included PROC6) Calendering operations	d duration of use/exposure ≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used ling Banburys) (PROC6)	
Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.11. Control of worker exposure: Calendering (include PROC6 Calendering operations) Product (article) characteristics Physical form of product	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used ling Banburys) (PROC6)	
Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.11. Control of worker exposure: Calendering (included PROC6 Calendering operations) Product (article) characteristics Physical form of product Concentration of substance in product	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used ling Banburys) (PROC6) Liquid ≤ 100 %	
Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.11. Control of worker exposure: Calendering (included PROC6 Calendering operations) Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used ling Banburys) (PROC6) Liquid ≤ 100 % d duration of use/exposure	
Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.11. Control of worker exposure: Calendering (included PROC6 Calendering operations) Product (article) characteristics Physical form of product Concentration of substance in product	d duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour) measures in place are being used ling Banburys) (PROC6) Liquid ≤ 100 %	

08/08/2022 (Revision date) IE - en 17/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and or	ganisational conditions and mea	sures	
	ce to check that the risk manageme ation conditions followed.	ent measures in place are being used	
Conditions and n	leasures related to personal prot	tection, hygiene and health evaluation	
Wear a respirator	providing a minimum efficiency of (%):	90 % (APF 10)
	affecting workers exposure		
indoor,and/or,outd			
Maximum process	·		≤ 320 °C
	orker exposure: Calendering (inc		
PROC6	Calendering operations	S	
Product (article)	characteristics		
Physical form of p	oduct	Liquid	
Concentration of s	ubstance in product	≤ 100 %	
Amount used (or	contained in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and or	ganisational conditions and mea	sures	
		ss than 3 to 5 air changes per hour).	30 %
Efficiency			
	ce to check that the risk manageme ation conditions followed.	ent measures in place are being used	
, ,	affecting workers exposure		'
indoor	, 5		
Maximum process	temperature		≤ 320 °C
•	orker exposure: Calendering (inc	luding Banburys) (PROC6)	
PROC6	Calendering operations		
Product (article)	characteristics		
Physical form of p		Liquid	
	ubstance in product	≤ 100 %	
	•		
•	contained in articles), frequency	· ·	
Exposure duration		≤ 8 h/day	
Technical and or	ganisational conditions and mea	sures	
	ce to check that the risk manageme ation conditions followed.	ent measures in place are being used	
Other conditions	affecting workers exposure		
outdoor			
Maximum process	temperature		≤ 320 °C
	· .		arging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance of	or mixture (charging and discharging) at r	non-dedicated facilities
Product (article)	characteristics		
Physical form of p	oduct	Liquid	
Concentration of s	ubstance in product	≤ 25 %	
Amount used (or	contained in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and or	ganisational conditions and mea	sures	
		ss than 1 to 3 air changes per hour)	
Supervision in place	,	ent measures in place are being used	
	affecting workers exposure		
indoor	0		
Maximum process	temperature		≤ 320 °C
	·		
.15. Control of we	orker exposu <u>re: Transfer of subs</u>	stance or mixtu <u>re (charging and discha</u>	arging) at non-dedicated facilities (PROC8a)

08/08/2022 (Revision date) IE - en 18/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and meas	sures	
Supervision in place to che correctly and operation cor		nt measures in place are being used	
Other conditions affecting	g workers exposure		
outdoor			
Maximum process tempera	ature		≤ 320 °C
2.16. Control of worker ex			rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance of	r mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and meas	sures	
<u> </u>	f general ventilation (not les	s than 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to che correctly and operation cor		nt measures in place are being used	
Other conditions affecting			
indoor	J		
Maximum process tempera	ature		≤ 320 °C
2.17. Control of worker ex	posure: Transfer of subst	ance or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance of	r mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and meas	sures	
Supervision in place to che correctly and operation cor		nt measures in place are being used	
Conditions and measure	s related to personal prot	ection, hygiene and health evaluation	
Wear a respirator providing	g a minimum efficiency of (%	6):	90 % (APF 10)
Other conditions affecting	g workers exposure		
indoor,and/or,Outdoor			
Maximum process tempera			≤ 320 °C
	•		rging) at non-dedicated facilities (PROC8a)
PROC8a	I ranster of substance of	r mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and meas	sures	
Provide a good standard o	f general ventilation (not les	s than 1 to 3 air changes per hour)	
Local exhaust ventilation - Supervision in place to che correctly and operation cor	eck that the risk managemen	nt measures in place are being used	90 %
·			
/08/2022 (Revision date)		IE - en	19/26

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers	exposure		
indoor			
Maximum process temperature			≤ 320 °C
2.19. Control of worker exposure: Tr	ansfer of substan	ce or mixture (charging and discha	arging) at dedicated facilities (PROC8b)
PROC8b Transfe	r of substance or n	nixture (charging and discharging) at o	dedicated facilities
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in artic	es), frequency an	d duration of use/exposure	
Exposure duration	,	≤ 8 h/day	
Technical and organisational condi	tions and measur	es	
Supervision in place to check that the correctly and operation conditions follows:	risk management r		
Other conditions affecting workers			
indoor,and/or,Outdoor	•		
Maximum process temperature			≤ 320 °C
2.20. Control of worker exposure: Tr	ansfer of substan	ce or mixture into small containers	(dedicated filling line, including weighing)
ROC9)			
PROC9 Transfe	r of substance or p	reparation into small containers (dedi	cated filling line, including weighing)
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in artic	es), frequency an	d duration of use/exposure	
Exposure duration	, , ,	≤ 8 h/day	
Technical and organisational condi	tions and measur	AS	
Supervision in place to check that the correctly and operation conditions follows:	risk management r		
Other conditions affecting workers			'
indoor,and/or,Outdoor			
Maximum process temperature			≤ 320 °C
2.21. Control of worker exposure: Ro	oller application o	r brushing (PROC10)	
PROC10 Roller a	pplication or brush	ing	
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in artic			
•	les), frequency an	•	
Exposure duration		≤ 8 h/day	
Technical and organisational condi			20.07
Provide a good standard of general ve Efficiency	enulation (not less t	וואוו א נס cnanges per hour).	30 %
Supervision in place to check that the correctly and operation conditions follows:		measures in place are being used	
Other conditions affecting workers			
indoor			
Maximum process temperature			≤ 320 °C
2.22. Control of worker exposure: Ro	oller appl <u>ication o</u>	r brushing (PROC10)	
· ,	pplication or brush		
Product (article) characteristics			
Physical form of product		Liquid	
		≤ 100 %	
· ·			
Concentration of substance in product		al along the second second	
· ·		d duration of use/exposure ≤ 8 h/day	

08/08/2022 (Revision date) IE - en 20/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisat	ional conditions and measur	es	
Supervision in place to che correctly and operation co		measures in place are being used	
Conditions and measure	es related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providir	ng a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecti	ng workers exposure		
indoor,and/or,Outdoor			
Maximum process temper	rature		≤ 320 °C
2.23. Control of worker e	xposure: Roller application o	r brushing (PROC10)	
PROC10	Roller application or brush	ing	
Product (article) charact	teristics		
Physical form of product		Liquid	
Concentration of substance	ce in product	≤ 100 %	
Amount used (or contai	ned in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisat	ional conditions and measur	es	
		han 1 to 3 air changes per hour)	
Local exhaust ventilation	,		90 %
	eck that the risk management r	measures in place are being used	
Other conditions affecti	ng workers exposure		
indoor			
Maximum process temper	rature		≤ 320 °C
2.24. Control of worker e	xposure: Roller application o	r brushing (PROC10)	
PROC10	Roller application or brush	ing	
Product (article) charact	teristics		
Physical form of product		Liquid	
Concentration of substance	ce in product	≤ 100 %	
Amount used (or contai	ned in articles), frequency an	d duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
Technical and organisat	ional conditions and measur	-	
	eck that the risk management r	measures in place are being used	
Other conditions affecti	ng workers exposure		
outdoor			
Maximum process tempe	rature		≤ 320 °C
2.25. Control of worker e	xposure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) charact	teristics		
Physical form of product		Liquid	
Concentration of substance	ce in product	· ≤ 100 %	
Amount used (or contain	ned in articles), frequency an	d duration of use/exposure	
Exposure duration	and the second s	≤ 8 h/day	
•	ional conditions and measur	•	
Provide a good standard of Efficiency	of general ventilation (not less t	han 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation co		,	
Other conditions affecti	ng workers exposure		
indoor			
Maximum process temper	rature		≤ 320 °C
2.26. Control of worker e	xposure: Treatment of article	s by dipping and pouring (PROC13)	

08/08/2022 (Revision date) IE - en 21/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), freque	ency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	measures	
Supervision in place to check that the risk manage		
correctly and operation conditions followed.	, , ,	
Conditions and measures related to personal	protection, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency	of (%):	90 %
Other conditions offeeting workers expecting		(APF 10)
Other conditions affecting workers exposure indoor,and/or,Outdoor		
Maximum process temperature		≤ 320 °C
2.27. Control of worker exposure: Treatment of	f articles by dipping and pouring (PROC13)	3 020 C
· · · · · · · · · · · · · · · · · · ·	es by dipping and pouring	
	,	
Product (article) characteristics Physical form of product	Liquid	
Concentration of substance in product	Liquid ≤ 100 %	
<u>'</u>		
Amount used (or contained in articles), freque		
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and a Supervision in place to check that the risk manag correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.28. Control of worker exposure: Treatment of	f articles by dipping and pouring (PROC13)	
PROC13 Treatment of article	es by dipping and pouring	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	· ≤ 100 %	
Amount used (or contained in articles), freque	ency and duration of use/exposure	
ranount deed (er contamied in an incide), in equi		
Exposure duration	· ·	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	≤ 8 h/day measures	
Technical and organisational conditions and a Provide a good standard of general ventilation (n	≤ 8 h/day measures	90 %
Technical and organisational conditions and	≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	90 %
Technical and organisational conditions and a Provide a good standard of general ventilation (n Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure	≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	90 %
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor	≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of the conditions affecting workers exposure indoor Maximum process temperature	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, control of worker exposure: Tabletting, control of worker exposure:	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granu	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compressions and the provided and the prov	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, Compression of the product (article) characteristics	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granuession, extrusion, pelettisation, granulation	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compressions of product (article) characteristics Physical form of product	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granulation Liquid	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, Compression of the product (article) characteristics	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granuession, extrusion, pelettisation, granulation	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compressions of Product (article) characteristics Physical form of product	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 %	≤ 320 °C
Technical and organisational conditions and organisational conditions and organisational conditions and organisational conditions and organisation and organisation conditions of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compression of the product (article) characteristics Physical form of product Concentration of substance in product	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 %	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (not Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, Compression of Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequence	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granuession, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compress PROC14 Tabletting, compress Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency from the provide a good standard of general ventilation (no Efficiency	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granulation compression, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour).	≤ 320 °C
Technical and organisational conditions and a Provide a good standard of general ventilation (no Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, compressional form of product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency from the content of the content	≤ 8 h/day measures ot less than 1 to 3 air changes per hour) gement measures in place are being used compression, extrusion, pelettisation, granulation compression, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour).	≤ 320 °C slation (PROC14)

08/08/2022 (Revision date) IE - en 22/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting	ng workers exposure		
indoor	•		
Maximum process temper	ature		≤ 320 °C
		ssion, extrusion, pelettisation, granu	lation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
	ned in articles), frequency an	d duration of use/exposure	
Exposure duration	ied in articles), frequency ar	≤ 8 h/day	
		,	
Supervision in place to che		measures in place are being used	
Correctly and operation co			
Other conditions affectir outdoor	ig workers exposure		
Maximum process temper	ature		≤ 320 °C
		ssion, extrusion, pelettisation, granu	
PROC14	<u> </u>	extrusion, pelettisation, granulation	lation (PROC14)
		Auguston, pelettisation, glanulation	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ned in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	ional conditions and measur	es	
Supervision in place to che correctly and operation co		measures in place are being used	
Conditions and measure	es related to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing	g a minimum efficiency of (%):		90 %
			(APF 10)
Other conditions affectir	ng workers exposure		
Indoor,and/or,outdoor			
Maximum process temper			≤ 320 °C
		ssion, extrusion, pelettisation, granu	lation (PROC14)
PROC14	J. 1	extrusion, pelettisation, granulation	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ned in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisat	ional conditions and measur	es	
		han 1 to 3 air changes per hour)	
	eck that the risk management	measures in place are being used	90 %
correctly and operation co			
Other conditions affecting indoor	ig workers exposure		
Maximum process temper	ature		≤ 320 °C
.2.33. Control of worker ex	cposure: Laboratory activitie		
PROC15	Use as laboratory reagent		
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
-			
8/08/2022 (Revision date)		IF - en	23/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration	,,q	≤ 8 h/day	
Technical and organisation	nal conditions and measur	AS	
	k that the risk management r	neasures in place are being used	
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperatu	ure		≤ 320 °C
2.34. Control of worker exp	osure: Equipment cleaning	and maintenance (PROC8a, PROC28	3)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at no	n-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration	u u,,quo, u	≤ 8 h/day	
·	nal canditions and massur	•	
Technical and organisation Supervision in place to check correctly and operation cond	k that the risk management r	neasures in place are being used	
Conditions and measures	related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a	a minimum efficiency of (%):		90 %
			(APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			4 000 00
Maximum process temperate			≤ 320 °C
<u>'</u>	· · · · · · · · · · · · · · · · · · ·	and maintenance (PROC8a, PROC28	<u>′</u>
PROC88		nixture (charging and discharging) at no	n-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation		•	
	nal conditions and measur	es	
Efficiency	general ventilation (not less t	han 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to check correctly and operation cond	general ventilation (not less t k that the risk management r litions followed.		30 %
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting	general ventilation (not less t k that the risk management r litions followed.	han 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor	general ventilation (not less t k that the risk management r litions followed. workers exposure	han 3 to 5 air changes per hour).	
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate	general ventilation (not less t k that the risk management r litions followed. workers exposure ure	han 3 to 5 air changes per hour). measures in place are being used	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker expe	general ventilation (not less to k that the risk management relitions followed. workers exposure ure osure: Equipment cleaning	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate	general ventilation (not less to k that the risk management of the litions followed. workers exposure ure osure: Equipment cleaning Transfer of substance or n	han 3 to 5 air changes per hour). measures in place are being used	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker exper PROC8a PROC28 Product (article) character	general ventilation (not less to the the risk management relitions followed. workers exposure ure osure: Equipment cleaning Transfer of substance or not manual maintenance (cleaning)	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC26 nixture (charging and discharging) at nothing and repair) of machinery	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker experience PROC8a PROC28 Product (article) character Physical form of product	general ventilation (not less to k that the risk management relations followed. workers exposure ure osure: Equipment cleaning Transfer of substance or not manual maintenance (cleanistics)	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28 nixture (charging and discharging) at no uning and repair) of machinery Liquid	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker exper PROC8a PROC28 Product (article) character	general ventilation (not less to k that the risk management relations followed. workers exposure ure osure: Equipment cleaning Transfer of substance or not manual maintenance (cleanistics)	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC26 nixture (charging and discharging) at nothing and repair) of machinery	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker exper PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	general ventilation (not less to the theorem of the	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28 nixture (charging and discharging) at no uning and repair) of machinery Liquid	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker experience PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	general ventilation (not less to the theorem of the	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28 nixture (charging and discharging) at no uning and repair) of machinery Liquid ≤ 100 %	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker experience PROC8a PROC28 Product (article) characteric Physical form of product Concentration of substance Amount used (or contained	general ventilation (not less to keep the theorem to the theorem t	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28 nixture (charging and discharging) at not ining and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker experience PROC8a PROC28 Product (article) character Physical form of product Concentration of substance in the condition of the contained exposure duration Technical and organisation	general ventilation (not less to keep the theorem to the theorem t	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC28 nixture (charging and discharging) at not ining and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 320 °C
Efficiency Supervision in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate 2.36. Control of worker experience PROC8a PROC28 Product (article) charactering Physical form of product Concentration of substance in the conditions of the contained exposure duration Technical and organisation Supervision in place to check	general ventilation (not less to the that the risk management relations followed. workers exposure ure osure: Equipment cleaning Transfer of substance or not manual maintenance (cleaning) istics in product d in articles), frequency and manual manu	han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC20 nixture (charging and discharging) at nouning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 320 °C

08/08/2022 (Revision date) IE - en 24/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Maximum process temper	erature		≤ 320 °C
2.37. Control of worker	exposure: Equipment cleanin	g and maintenance (PROC8a, PROC	28)
PROC8a	Transfer of substance or	mixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (cle	aning and repair) of machinery	
Product (article) charac	cteristics		
Physical form of product		Liquid	
Concentration of substar	nce in product	≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure			
Exposure duration		≤ 8 h/day	
Technical and organisa	ational conditions and measu	res	
Provide a good standard	of general ventilation (not less	than 1 to 3 air changes per hour)	
Local exhaust ventilation	- efficiency of at least		90 %
Supervision in place to c correctly and operation c		measures in place are being used	
Other conditions affect	ing workers exposure		
indoor			
Maximum process tempe	erature		≤ 320 °C
2 Evposure estima	ation and reference to it	e cource	

1.3.1. Environmental release and ex	posure Formulation and	(re)packagir	a (ERC2)
1.5.1. Elivii olillielitai lelease alla ex	posure i ormanation and i	(I C) Packagii	19 (11/02)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	0.5 %	ESVOC SPERC 2.2.v1
Release to waste water from process	166.5 kg/day	ESVOC SPERC 2.2.v1
Release fraction to air from process	2.5 %	ESVOC SPERC 2.2.v1
Release to air from process	832.5 kg/day	ESVOC SPERC 2.2.v1
Release fraction to soil from process	0.01 %	ESVOC SPERC 2.2.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	1.785	10.6	0.168	EUSES v2.1.2
Marine water	mg/l	0.174	1.06	0.164	EUSES v2.1.2
Freshwater sediment	mg/kg	7.827	30.4	0.257	EUSES v2.1.2
Marine water sediment	mg/kg	0.761	3.04	0.25	EUSES v2.1.2
Sewage treatment plant	mg/l	10.37	100	0.104	EUSES v2.1.2
Soil	mg/kg	0.197	29.5	0.007	EUSES v2.1.2

1.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

1.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 25/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

.3.4. Worker exposure Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled xposure or processes with equivalent containment condition (PROC3)			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	production where opportunity for e	RCR	Method
Route of exposure and type of effects	Exposure estimate		
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	000	0.237	FOFTOO TDA
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
1.3.6. Worker exposure Mixing op	```	DCD	Mothod
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
1.3.7. Worker exposure Mixing op		202	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1690 mg/m³	0.424	FOFTOO TDAdura
Acute - Local - Inhalation 1.3.8. Worker exposure Mixing op		0.698	ECETOC TRA worker
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000 m g/m3	0.424	FOFTOO TDA wardara
Acute - Local - Inhalation 1.3.9. Worker exposure Mixing op	1690 mg/m³ erations (open systems) (PROC5)	0.698	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
1.3.10. Worker exposure Calende	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.743 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term -		0.065	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	ring (including Banburys) (PROC6		TOP TO THE WORKER
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
·	ring (including Banburys) (PROC6	RCR	Mathad
Route of exposure and type of effects	Exposure estimate		Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.497	ECETOC TRA worker
	ring (including Banburys) (PROC6		LOCIOO INA WORKE
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
Route of exposure and type		and discharging) at non-dedicated	Method
of effects	Exposure estimate	KOK	Wethod
Dermal - Long-term - systemic effects	8.226 mg/kg bw/day	0.044	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.344	
Acute - Local - Inhalation	1450 mg/m³	0.599 and discharging) at non-dedicated	ECETOC TRA worker
	<u> </u>	, <u> </u>	Method
Route of exposure and type of effects	Exposure estimate	RCR	wethod
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1600 mg/m3	0.424	ECETOC TRA worker
	of substance or mixture (charging	g and discharging) at non-dedicated	1
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.17. Worker exposure Transfer Route of exposure and type of effects	of substance or mixture (charging Exposure estimate	and discharging) at non-dedicated RCR	facilities (PROC8a) Method
Dermal - Long-term - systemic	13.71 mg/kg bw/day	0.074	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
1.3.18. Worker exposure Transfer	of substance or mixture (charging	and discharging) at non-dedicated t	acilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	242	0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	of substance or mixture (charging a		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	363 mg/m³	0.3	ECETOC TRA worker
systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
	of substance or mixture into small		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
1.3.21. Worker exposure Roller ap			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects		0.497	
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³		ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects	1690 mg/m³	0.497	
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic	1690 mg/m³ pplication or brushing (PROC10)	0.497	ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	1690 mg/m³ pplication or brushing (PROC10) Exposure estimate	0.497 0.698 RCR	ECETOC TRA worker Method
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³	0.497 0.698 RCR 0.147 0.05 0.197	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³	0.497 0.698 RCR 0.147 0.05	ECETOC TRA worker Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.23. Worker exposure Roller ap	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10)	0.497 0.698 RCR 0.147 0.05 0.197	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.23. Worker exposure Roller ap Route of exposure and type of effects	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate	0.497 0.698 RCR 0.147 0.05 0.197 0.1	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.23. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day	0.497 0.698 RCR 0.147 0.05 0.197 0.1 RCR	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.23. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate	0.497 0.698 RCR 0.147 0.05 0.197 0.1 RCR 0.147 0.05	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.22. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 1.3.23. Worker exposure Roller ap Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	1690 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day	0.497 0.698 RCR 0.147 0.05 0.197 0.1 RCR	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

08/08/2022 (Revision date) IE - en 28/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

<u> </u>	oplication or brushing (PROC10)	non	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	nt of articles by dipping and pour		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
· ·	nt of articles by dipping and pour	<u> </u>	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	FORTON TRA
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	nt of articles by dipping and pour		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1000 / 2	0.424	ECETOC TRA worker
Acute - Local - Inhalation	1690 mg/m ³ nt of articles by dipping and pour	0.698	ECETOC TRA Worker
			Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	242 mg/m³	0.057	ECETOC TRA worker
Acute - Local - Inhalation	ig, compression, extrusion, pelet		ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.368	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.30. Worker exposure Tablettir	g, compression, extrusion, pelet	tisation, granulation (PROC14)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
oi ellecis			
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term -		0.368	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ng, compression, extrusion, pelettis	· · · · · · · · · · · · · · · · · · ·	Let red Trut Wenter
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.068	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·	ng, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.343 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040/3	0.052	ECETOO TOA
Acute - Local - Inhalation 1.3.33. Worker exposure Laborato	242 mg/m³	0.1	ECETOC TRA worker
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4/2.2	0.102	ECETOO TDAdura
Acute - Local - Inhalation	484 mg/m³ ent cleaning and maintenance (PRC	0.2	ECETOC TRA worker
			Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.124	ECETOC TRA worker
	ent cleaning and maintenance (PRC	1 -	ECETOC TRA Worker
	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ent cleaning and maintenance (PRC		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ent cleaning and maintenance (PRC		Mathed
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term -	60.5 mg/m ³	0.05	ECETOC TRA worker
systemic effects	J J		
Sum RCR - Long-term -		0.057	
systemic effects			
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

Acute - Local - Inhalation 242 mg/m³ 0.1 ECETOC TRA worker 1.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES 1.4.1. Environment Guidance - Environment Guidance - Environment Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures 1.4.2. Health Guidance - Health No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.

ERC6a

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

2. AC SE02: Use as an intermediate

Use as an interm	ediate	ES Ref.: AC S ES Type: Wo	
Environment			
CS 1	Use as an intermediate	E	ERC6a
Worker			
	Worker Contributing Scenario	F F	PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28

2.2. Conditions of use affecting exposure

2.2.1. Control of environmental exposure: Use as an intermediate (ERC6a)

Use of intermediate

Amount used, frequency and duration of use (or from service life)		
Daily amount per site	≤ 33.3 t/d	
Annual site tonnage (tons/year):	≤ 10000 t/yr	
Conditions and measures related to sewage treatment plant		
Assumed domestic sewage treatment plant flow	≥ 2000 m³/d	
Sludge treatment technique :	Controlled application to agricultural soil	

Conditions and measures related to treatment of waste (including article waste)

Dispose of waste in accordance with environmental legislation

2.2.2. Control of worker exposure: Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC14	Tabletting, compression, extrusion, pelettisation, granulation
PROC15	Use as laboratory reagent
PROC28	Manual maintenance (cleaning and repair) of machinery

2.3. Exposure estimation and reference to its source

2.3.1. Environmental release and exposure Use as an intermediate (ERC6a)

Release route		Release rate Release estimation method			timation method	
Receiving surface water flow is 18000 m³/d						
Release fraction to wastewater		1 %		ESVOC SPERC 6.1a.v1		
Release to waste water from process		333 kg/day			ESVOC SPERC 6.1a.v1	
Release fraction to air from process		0.5 %			ESVOC SF	ERC 6.1a.v1
Release to air from process		166.5 kg/day			ESVOC SPERC 6.1a.v1	
Release fraction to soil from process		0.1 %			ESVOC SPERC 6.1a.v1	
Protection target Unit	Evnosi	Iro	DNEC	DCD		Assassment method

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	2.822	10.6	0.266	EUSES v2.1.2

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Marine water	mg/l	0.277	1.06	0.261	EUSES v2.1.2
Freshwater sediment	mg/kg	12.37	30.4	0.407	EUSES v2.1.2
Marine water sediment	mg/kg	1.216	3.04	0.4	EUSES v2.1.2
Sewage treatment plant	mg/l	20.73	100	0.207	EUSES v2.1.2
Soil	mg/kg	0.331	29.5	0.011	EUSES v2.1.2

2.3.2. Worker exposure Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

Information for contributing exposure scenario

See exposure scenario nr AC SE01

2.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

2.4. Guidance to Downstre 2.4.1. Environment	am User to evaluate whether he works inside the boundaries set by the ES
Guidance - Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures
2.4.2. Health	
Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.

08/08/2022 (Revision date) IE - en 33/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

3. AC SE03: Use as solvent during synthesis of chemicals, processing not covered otherwise

Use as solvent during synthesis of chemicals, processing not covered otherwise		ES Ref.: AC SE03 ES Type: Worker		Association ref code: IS
Environment				
CS 1	Use as solvent during synthesis of cher not covered otherwise	Use as solvent during synthesis of chemicals, processing not covered otherwise		
Worker				
	Worker Contributing Scenario		PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28	
Processes, tasks, activities covered Use at industrial		S)		

3.2. Conditions of use affecting exposure

3.2.1. Control of environmental exposure: Use as solvent during synthesis of chemicals, processing not covered otherwise (ERC4)

ERC4 Use of non-reactiv	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)		
Amount used, frequency and duration of use	(or from service life)		
Daily amount per site	≤ 0.8 t/d		
Annual site tonnage (tons/year):	≤ 16 t/yr		
Conditions and measures related to sewage t	reatment plant		
Assumed domestic sewage treatment plant flow	≥ 2000 m³/d		
Sludge treatment technique :	Controlled application to agricultural soil		
Conditions and measures related to treatmen	t of waste (including article waste)		
Dispose of waste in accordance with environmen legislation	ntal		

3.2.2. Control of worker exposure: Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC14	Tabletting, compression, extrusion, pelettisation, granulation
PROC15	Use as laboratory reagent
PROC28	Manual maintenance (cleaning and repair) of machinery

3.3. Exposure estimation and reference to its source

3.3.1. Environmental release and exposure Use as solvent during synthesis of chemicals, processing not covered otherwise (ERC4)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	100 %	ERC
Release to waste water from process	800 kg/day	ERC
Release fraction to air from process	100 %	ERC
Release to air from process	800 kg/day	ERC
Release fraction to soil from process	5 %	ERC

08/08/2022 (Revision date) IE - en 34/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	5.729	10.6	0.54	EUSES v2.1.2
Marine water	mg/l	0.568	1.06	0.536	EUSES v2.1.2
Freshwater sediment	mg/kg	25.13	30.4	0.827	EUSES v2.1.2
Marine water sediment	mg/kg	2.491	3.04	0.819	EUSES v2.1.2
Sewage treatment plant	mg/l	49.81	100	0.498	EUSES v2.1.2
Soil	mg/kg	0.753	29.5	0.026	EUSES v2.1.2

3.3.2. Worker exposure Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

Information for contributing exposure scenario

See exposure scenario nr AC SE01

3.4. Guidance to Downstre	am User to evaluate whether he works inside the boundaries set by the ES
3.4.1. Environment	
Guidance - Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures
3.4.2. Health	
Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.

08/08/2022 (Revision date) IE - en 35/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

4. AC SE04: Use in laboratories

Use in laboratorie	es	ES Ref.: AC SE04 ES Type: Worker	Association ref code: IS
Environment			
CS 1	Use in laboratories	ERC4	
Worker			
CS 2	Roller application or brushing	PROC10	
CS 3	Roller application or brushing	PROC10	
CS 4	Roller application or brushing	PROC10	
CS 5	Roller application or brushing	PROC10	
CS 6	Laboratory activities	PROC15	
CS 7	Manual activities involving hand contact	PROC19	
CS 8	Manual activities involving hand contact	PROC19	
CS 9	Manual activities involving hand contact	PROC19	
CS 10	Equipment cleaning and maintenance	PROC8a, PROC	28
CS 11	Equipment cleaning and maintenance	PROC8a, PROC	28
CS 12	Equipment cleaning and maintenance	PROC8a, PROC	28
CS 13	Equipment cleaning and maintenance	PROC8a, PROC	228
Processes, tasks, activitie	s covered Use at industrial sites (IS)		
2. Conditions of use	e affecting exposure		

4.2.1. Control of environmental exposure: Use in laboratories (ERC4)			
ERC4	Jse of non-reactive proces	ssing aid at industrial site (no inclusion into or onto article)	
Amount used, frequency and	duration of use (or fron	n service life)	
Daily amount per site		≤ 0.8 t/d	
Annual site tonnage (tons/year):		≤ 16 t/yr	
Conditions and measures related to sewage treatment plant			
Assumed domestic sewage trea	atment plant flow	≥ 2000 m³/d	
Sludge treatment technique :		Controlled application to agricultural soil	
Conditions and measures rel	onditions and measures related to treatment of waste (including article waste)		
Dispose of waste in accordance	e with environmental		

4.2.2. Control of worker exposure: Roller application or brushing (PROC10)

PROC10	Roller application or brushi	ing
Product (article) characteristics		
Physical form of product		Liquid
Concentration of substance in product		≤ 100 %
Amount used (or contained in articles), frequency and duration of use/exposure		
Exposure duration		≤ 8 h/day
Technical and organicational conditions and measures		

Technical and organisational conditions and measures
--

Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	30 %
Efficiency	
Supervision in place to check that the risk management measures in place are being used	
correctly and operation conditions followed.	

Other conditions affecting workers exposure

Indoor	
Maximum process temperature	≤ 320 °C

4.2.3. Control of worker exposure: Roller application or brushing (PROC10)

	PROC10	Roller application or brush	ing
Product (article) characteristics			
	Physical form of product		Liquid
	Concentration of substance in	n product	≤ 100 %

08/08/2022 (Revision date) IE - en 36/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained in articles), frequency ar	d duration of use/exposure							
Exposure duration	≤ 8 h/day							
Technical and organisational conditions and measur	es							
-	Supervision in place to check that the risk management measures in place are being used							
correctly and operation conditions followed.								
Conditions and measures related to personal protec	tion, hygiene and health evaluation							
Wear a respirator providing a minimum efficiency of (%):		90 % (APF 10)						
Other conditions affecting workers exposure								
Indoor,and/or,Outdoor								
Maximum process temperature		≤ 320 °C						
4.2.4. Control of worker exposure: Roller application or	brushing (PROC10)							
PROC10 Roller application or brush	ning							
Product (article) characteristics								
Physical form of product	Liquid							
Concentration of substance in product	≤ 100 %							
Amount used (or contained in articles), frequency ar	nd duration of use/exposure							
Exposure duration	≤ 8 h/day							
Technical and organisational conditions and measur	700							
Provide a good standard of general ventilation (not less								
Local exhaust ventilation - efficiency of at least	and it to 5 an originges per nour)	90 %						
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	90 /6						
Other conditions affecting workers exposure								
indoor								
Maximum process temperature		≤ 320 °C						
4.2.5. Control of worker exposure: Roller application or	brushing (PROC10)							
PROC10 Roller application or brush	ning							
Product (article) characteristics								
Physical form of product	Liquid							
Concentration of substance in product	≤ 100 %							
Amount used (or contained in articles), frequency ar	d duration of use/exposure							
Exposure duration	≤ 8 h/day							
Technical and organisational conditions and measur	res							
Supervision in place to check that the risk management								
correctly and operation conditions followed.								
Other conditions affecting workers exposure								
outdoor								
Maximum process temperature		≤ 320 °C						
4.2.6. Control of worker exposure: Laboratory activities	(PROC15)							
PROC15 Use as laboratory reagent								
Product (article) characteristics								
Physical form of product	Liquid							
Concentration of substance in product	≤ 100 %							
Amount used (or contained in articles), frequency ar	d duration of use/exposure							
Exposure duration	≤ 8 h/day							
Technical and organisational conditions and measur	·							
Supervision in place to check that the risk management correctly and operation conditions followed.								
Other conditions affecting workers exposure								
Other conditions affecting workers exposure Indoor,and/or,Outdoor								
		≤ 320 °C						

08/08/2022 (Revision date) IE - en 37/265

PROC19	Manual activities involvir	ng hand contact	
		.9	
Product (article) chara		Lieud	
Physical form of product		Liquid	
Concentration of substa	nce in product	≤ 100 %	
Amount used (or conta	ined in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organis	ational conditions and meas	ures	
Efficiency	,	s than 3 to 5 air changes per hour).	30 %
Supervision in place to correctly and operation of		t measures in place are being used	
Conditions and measu	res related to personal prote	ection, hygiene and health evaluation	
Wear gloves providing a	minimum efficiency of (%):		80 % (EN 374)
Other conditions affec	ting workers exposure		
indoor			
Maximum process temp	erature		≤ 56 °C
.8. Control of worker e	xposure: Manual activities in	volving hand contact (PROC19)	
PROC19	Manual activities involving	ng hand contact	
Product (article) chara	cteristics		
Physical form of product		Liquid	
Concentration of substa		≤ 100 %	
Amount used for cents	inad in articles) frequency	and duration of use/expecure	
Exposure duration	ined in articles), frequency a	and duration of use/exposure ≤ 8 h/day	
·		•	
	ational conditions and measi		
correctly and operation of	conditions followed.	t measures in place are being used	
Conditions and measu	res related to personal prote	ection, hygiene and health evaluation	
Wear gloves providing a	minimum efficiency of (%):		80 % (EN 374)
Other conditions affec	ting workers exposure		
outdoor			
Maximum process temp	erature		≤ 56 °C
.9. Control of worker e	xposure: Manual activities in	volving hand contact (PROC19)	
PROC19	Manual activities involving	ng hand contact	
Product (article) chara	cteristics		
Physical form of product		Liquid	
Concentration of substa	nce in product	· ≤ 100 %	
	·	and duration of use/exposure	
Exposure duration	med in articles), frequeficy a	≤ 8 h/day	
		•	
	ational conditions and measi		
	,	s than 1 to 3 air changes per hour)	
I a seek a first of the Charles		t measures in place are being used	90 %
		ection, hygiene and health evaluation	
Supervision in place to correctly and operation of	res related to personal prote		
Supervision in place to correctly and operation of Conditions and measu	res related to personal prote minimum efficiency of (%):	, , g	80 % (EN 374)
Supervision in place to correctly and operation of Conditions and measu Wear gloves providing a	minimum efficiency of (%):		
Supervision in place to correctly and operation of Conditions and measurement when gloves providing a Other conditions affect	minimum efficiency of (%):		
Supervision in place to correctly and operation of Conditions and measu Wear gloves providing a Other conditions affectindoor	minimum efficiency of (%):		(EN 374)
Supervision in place to correctly and operation of Conditions and measurement Wear gloves providing a Other conditions affectindoor Maximum process temp	minimum efficiency of (%): ting workers exposure erature	ng and maintenance (PROC8a, PROC	(EN 374) ≤ 56 °C

PROC28	Manual maintenance (c	leaning and repair) of machinery	
Product (article) characte	,	3	
Physical form of product	risucs	Liquid	
Concentration of substance	e in product	≤ 100 %	
	•		
	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation			
correctly and operation con	ditions followed.	nt measures in place are being used	
		ection, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%	6) :	90 % (APF 10)
Other conditions affecting	g workers exposure		
indoor,and/or,Outdoor			
Maximum process tempera	iture		≤ 320 °C
.11. Control of worker ex	posure: Equipment cleani	ing and maintenance (PROC8a, PROC2	8)
PROC8a		r mixture (charging and discharging) at no	n-dedicated facilities
PROC28	Manual maintenance (c	leaning and repair) of machinery	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and meas	sures	
Provide a good standard of Efficiency Supervision in place to che	<u> </u>	es than 3 to 5 air changes per hour).	30 %
		in measures in place are being used	
correctly and operation con	ditions followed.	it measures in place are being used	
	ditions followed.	it measures in place are being used	
correctly and operation con Other conditions affecting indoor	ditions followed. g workers exposure	it measures in place are being useu	≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera	ditions followed. g workers exposure uture	ing and maintenance (PROC8a, PROC2)	≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera	ditions followed. g workers exposure ture posure: Equipment clean	ing and maintenance (PROC8a, PROC2	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera	ditions followed. g workers exposure uture posure: Equipment clean Transfer of substance o		B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (cl	ing and maintenance (PROC8a, PROC2) or mixture (charging and discharging) at no	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (cl	ing and maintenance (PROC8a, PROC2ar mixture (charging and discharging) at no leaning and repair) of machinery	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (cleans)	ing and maintenance (PROC8a, PROC2) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean) pristics e in product	ing and maintenance (PROC8a, PROC2ar mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 %	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean) pristics e in product	ing and maintenance (PROC8a, PROC2ar mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean) pristics e in product	ing and maintenance (PROC8a, PROC2ar mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 %	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or contained Exposure duration	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (cleanics) eristics e in product ed in articles), frequency	ing and maintenance (PROC8a, PROC2ion mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisation	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk managemen	ing and maintenance (PROC8a, PROC2ion mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Supervision in place to chee	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed.	ing and maintenance (PROC8a, PROC2a) remixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatic Supervision in place to che correctly and operation con Other conditions affecting outdoor	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure	ing and maintenance (PROC8a, PROC2a) remixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures	B)
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Exposure duration Technical and organisation Supervision in place to checorrectly and operation con Other conditions affecting outdoor Maximum process tempera	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure	ing and maintenance (PROC8a, PROC2) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures nt measures in place are being used	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatic Supervision in place to che correctly and operation con Other conditions affecting outdoor Maximum process tempera13. Control of worker exp	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure eture posure: Equipment clean	ing and maintenance (PROC8a, PROC2a) remixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisation Supervision in place to checorrectly and operation con Other conditions affecting outdoor Maximum process tempera13. Control of worker exp	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o	ing and maintenance (PROC8a, PROC2ar mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Exposure duration Technical and organisatic Supervision in place to checorrectly and operation con Other conditions affecting outdoor Maximum process tempera13. Control of worker exp PROC8a PROC28	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean	ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatic Supervision in place to che correctly and operation con Other conditions affecting outdoor Maximum process tempera13. Control of worker exp PROC8a PROC28 Product (article) characte	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean	ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to che correctly and operation con Other conditions affecting outdoor Maximum process tempera 2.13. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (clean eristics eristics characteristics characteristics	ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Exposure duration Technical and organisatic Supervision in place to checorrectly and operation con Other conditions affecting outdoor Maximum process tempera13. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (ci eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (ci eristics e in product	ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 %	n-dedicated facilities ≤ 320 °C
correctly and operation con Other conditions affecting indoor Maximum process tempera 2.12. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatic Supervision in place to che correctly and operation con Other conditions affecting outdoor Maximum process tempera 2.13. Control of worker exp PROC8a PROC28 Product (article) characte Physical form of product Concentration of substance	ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (ci eristics e in product ed in articles), frequency conal conditions and meas ck that the risk management ditions followed. g workers exposure ture posure: Equipment clean Transfer of substance o Manual maintenance (ci eristics e in product	ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day sures Int measures in place are being used ing and maintenance (PROC8a, PROC2a) or mixture (charging and discharging) at no leaning and repair) of machinery Liquid	n-dedicated facilities ≤ 320 °C

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisation	onal c	onditions and	measur	es				
Provide a good standard of					hanges per ho	ur)		
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.						,	90 %	
Other conditions affecting								
indoor	y work	ters exposure						
Maximum process tempera	turo						≤ 320 °C	
3. Exposure estimati		nd referenc	e to its	source			= 320 C	
3.1. Environmental release								
Release route		·		Release rate			Release 6	estimation method
Receiving surface water flo	w is 1	8000 m³/d						
Release fraction to wastew				100 %			ERC	
Release to waste water fro	m prod	ess		800 kg/day			ERC	
Release fraction to air from				100 %			ERC	
Release to air from process	•			800 kg/day			ERC	
Release fraction to soil				5 %			ERC	
Protection target	Unit		Exposu		PNEC	R	CR	Assessment method
37.			estima					
Freshwater	mg/l		5.729		10.6	0.	54	EUSES v2.1.2
Marine water	mg/l		0.568		1.06	0.	536	EUSES v2.1.2
Freshwater sediment	mg/k	g	25.13		30.4	0.	327	EUSES v2.1.2
Marine water sediment	mg/k	g	2.491		3.04	0.	319	EUSES v2.1.2
Sewage treatment plant	mg/l		49.81		100	0.4	198	EUSES v2.1.2
Soil	mg/k	g	0.753		29.5	0.	026	EUSES v2.1.2
.2. Worker exposure Roll	er app	lication or bro	ushing (I	PROC10)				
Route of exposure and ty of effects	/pe	Exposure es	timate		RCR			Method
Dermal - Long-term - syste effects	emic	27.43 mg/kg			0.147			ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -		423.5 mg/m³			0.35			ECETOC TRA worker
systemic effects					0.497			
Acute - Local - Inhalation		1690 mg/m ³			0.698			ECETOC TRA worker
.3. Worker exposure Roll				PROC10)				
Route of exposure and ty of effects	/pe	Exposure es	timate		RCR			Method
Dermal - Long-term - syste effects	emic	27.43 mg/kg	bw/day		0.147			ECETOC TRA worker
Inhalation - Long-term - systemic effects		60.5 mg/m ³			0.05		ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.40			0.197			
Acute - Local - Inhalation .4. Worker exposure Rolle	or ape	242 mg/m³	ıshina (PROC10)	0.1			ECETOC TRA worker
Route of exposure and ty of effects		Exposure es		KOCTO)	RCR			Method
Dermal - Long-term - syste effects	emic	27.43 mg/kg	bw/day		0.147			ECETOC TRA worker
Inhalation - Long-term - systemic effects		60.5 mg/m ³			0.05			ECETOC TRA worker
Sum RCR - Long-term - systemic effects					0.197			
Acute - Local - Inhalation		242 mg/m ³			0.1			ECETOC TRA worker
.5. Worker exposure Roll Route of exposure and ty of effects		Exposure es		PROC10)	RCR			Method
Dermal - Long-term - syste effects	emic	27.43 mg/kg	bw/day		0.147			ECETOC TRA worker
Inhalation - Long-term -		423.5 mg/m ³			0.35			ECETOC TRA worker

08/08/2022 (Revision date) IE - en 40/265

Sum RCR - Long-term -		0.497	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
4.3.6. Worker exposure Laborator			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.102	
Acute - Local - Inhalation	484 mg/m ³	0.2	ECETOC TRA worker
4.3.7. Worker exposure Manual ac	ctivities involving hand contact (PR	OC19)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000	0.502	ECETOC TRA
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ctivities involving hand contact (PR		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1600 mg/m³	0.502	ECETOC TRA worker
	1690 mg/m³	0.698	ECETOC TRA worker
	ctivities involving hand contact (PR	· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040	0.202	ECETOC TRAdisa
Acute - Local - Inhalation	242 mg/m³	0.1	
4.3.10. Worker exposure Equipme	int alconing and maintenance (DDO)		ECETOC TRA worker
	ent cleaning and maintenance (PRO	C8a, PROC28)	
Route of exposure and type of effects			Method
of effects Dermal - Long-term - systemic effects	Exposure estimate 13.71 mg/kg bw/day	C8a, PROC28) RCR 0.074	Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	Exposure estimate	C8a, PROC28) RCR 0.074 0.05	Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124	Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1	Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1	Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipment Route of exposure and type of effects Dermal - Long-term - systemic	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PRO	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipment Route of exposure and type of effects	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEExposure estimate	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEXPOSURE estimate) 13.71 mg/kg bw/day 423.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEXPOSURE estimate 13.71 mg/kg bw/day 423.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEXPOSURE estimate) 13.71 mg/kg bw/day 423.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEXPOSURE estimate) 13.71 mg/kg bw/day 423.5 mg/m³	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.11. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4.3.12. Worker exposure Equipme Route of exposure and type	Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ ent cleaning and maintenance (PROEExposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent cleaning and maintenance (PROEEXPOSURE)	C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698 C8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

4.3.13. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker

4.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

4.4.1. Environment

Guidance - Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus,
	scaling may be necessary to define appropriate site-specific risk management measures

4.4.2. Health

Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to
	guarantee safe use for workers.

08/08/2022 (Revision date) IE - en 42/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

5. AC SE05: Uses in Coatings

.1. Title section					
Uses in Coatings		ES Ref.: AC SE05 ES Type: Worker			
Environment					
CS 1	Uses in Coatings		ERC4		
Worker					
CS 2	Chemical production or refinery in clo likelihood of exposure or processes we containment conditions; Storage		PROC1		
CS 3	Chemical production or refinery in clo process with occasional controlled ex with equivalent containment condition	cposure or processes	PROC2		
CS 4	Manufacture or formulation in the che closed batch processes with occasio exposure or processes with equivale condition	nal controlled	PROC3		
CS 5	Chemical production where opportun arises	ity for exposure	PROC4		
CS 6	Mixing operations (open systems)		PROC5		
CS 7	Mixing operations (open systems)		PROC5		
CS 8	Mixing operations (open systems)		PROC5		
CS 9	Mixing operations (open systems)		PROC5		
CS 10	Industrial spraying		PROC7		
CS 11	Industrial spraying		PROC7		
CS 12	Transfer of substance or mixture (chadischarging) at non-dedicated facilities		PROC8a		
CS 13	Transfer of substance or mixture (chadischarging) at non-dedicated facilities		PROC8a		
CS 14	Transfer of substance or mixture (chadischarging) at non-dedicated facilities		PROC8a		
CS 15	Transfer of substance or mixture (chadischarging) at non-dedicated facilities		PROC8a		
CS 16	Transfer of substance or mixture (chadischarging) at dedicated facilities		PROC8b		
CS 17	Transfer of substance or mixture into (dedicated filling line, including weigh		PROC9		
CS 18	Roller application or brushing		PROC10		
CS 19	Roller application or brushing		PROC10		
CS 20	Roller application or brushing		PROC10		
CS 21	Roller application or brushing		PROC10		
CS 22	Treatment of articles by dipping and		PROC13		
CS 23	Treatment of articles by dipping and		PROC13		
CS 24	Treatment of articles by dipping and		PROC13		
CS 25	Treatment of articles by dipping and	pouring	PROC13		
CS 26	Tabletting, compression, extrusion, p granulation	elettisation,	PROC14		
CS 27	Tabletting, compression, extrusion, p granulation	elettisation,	PROC14		
CS 28	Tabletting, compression, extrusion, p granulation	elettisation,	PROC14		
CS 29	Tabletting, compression, extrusion, p granulation	elettisation,	PROC14		
CS 30	Laboratory activities		PROC15		
CS 31	Manual activities involving hand cont	act	PROC19		
CS 32	Manual activities involving hand cont	act	PROC19		
CS 33	Manual activities involving hand cont	act	PROC19		
CS 34	Equipment cleaning and maintenance		PROC8a, PROC28		
CS 35	Equipment cleaning and maintenanc	е	PROC8a, PROC28		

legislation

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CS 36	Equipment cleaning and maintenance	PROC8a, PROC28
CS 37	Equipment cleaning and maintenance	PROC8a, PROC28
Processes, tasks, activities covere	d Use at industrial sites (IS)	

5.2. Conditions of use affecting exposure

	5.2.1. Control of	f environmental ex	posure: Uses in	Coatings ((ERC4)
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3.2.1. Control of environmental e	Aposure. Oses in Coan	ngs (ERO+)		
ERC4 Use of non-reactive proces		ssing aid at industrial site (no inclusion into or onto article)		
Amount used, frequency and duration of use (or from service life)				
Daily amount per site		≤ 40 t/d		
Annual site tonnage (tons/year):		≤ 12000 t/yr		
Conditions and measures rela	Conditions and measures related to sewage treatment plant			
Assumed domestic sewage treatment plant flow		≥ 2000 m³/d		
Sludge treatment technique :		Controlled application to agricultural soil		
Conditions and measures rela	Conditions and measures related to treatment of waste (including article waste)			
Dispose of waste in accordance with environmental				

5.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions; Storage (PROC1)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Product (article) characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

indoor,and/or,Outdoor

Maximum process temperature ≤ 56 °C

5.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes
	with equivalent containment conditions

Product (article) characteristics

Physical form of product Liquid Concentration of substance in product \leq 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used

Other conditions affecting workers exposure

correctly and operation conditions followed.

Concentration of substance in product

indoor,and/or,Outdoor

Maximum process temperature ≤ 56 °C

5.2.4. Control of worker exposure: Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

< 100 %

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
Product (article) characte	ristics
Physical form of product	Liquid

08/08/2022 (Revision date) IE - en 44/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Exposure duration		≤ 8 h/day	
Technical and organisat	onal conditions and measu	ıres	
Jse in closed batch proces	ss (synthesis or formulation).	With occasional controlled exposure	
Supervision in place to che correctly and operation co	· ·	measures in place are being used	
Other conditions affectir	g workers exposure		
ndoor,and/or,Outdoor			
Maximum process temper	ature		≤ 56 °C
.5. Control of worker exp		n where opportunity for exposure ari	ses (PROC4)
PROC4	Chemical production whe	ere opportunity for exposure arises	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substanc	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration	,, , ,	≤ 8 h/day	
·	onal conditions and measu	<u> </u>	
	eck that the risk management	measures in place are being used	
Other conditions affecting	g workers exposure		
ndoor,and/or,Outdoor			
Maximum process temper	ature		≤ 56 °C
.6. Control of worker exp	osure: Mixing operations (open systems) (PROC5)	
PROC5	Mixing or blending in bate	ch processes	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	· ≤ 100 %	
Amount used (or contain	and in articles) frequency a	nd duration of use/exposure	
Exposure duration	eu in articles), frequency a	≤ 8 h/day	
		, , , , , , , , , , , , , , , , , , ,	
	onal conditions and measu	than 3 to 5 air changes per hour).	30 %
Efficiency	r general ventilation (not less	than 3 to 3 all changes per nour).	30 76
Supervision in place to che correctly and operation co		measures in place are being used	
Other conditions affecting	g workers exposure		
ndoor			
Maximum process temper	ature		≤ 56 °C
·	osure: Mixing operations (
PROC5	Mixing or blending in bate	ch processes	
Product (article) charact	eristics		
Physical form of product		Liquid	
Concentration of substanc	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Exposure duration	onal conditions and measu	ires	
·	eck that the risk management	measures in place are being used	
Гесhnical and organisati	naitions followea.		
Fechnical and organisation of the confection of the correctly and operation confection c		ction, hygiene and health evaluation	
Fechnical and organisation of the correctly and operation co-			90 % (APF 10)
Fechnical and organisation of the correctly and operation co-	s related to personal protecting a minimum efficiency of (%)		
Fechnical and organisation of the correctly and operation control of the correctly and operation control of the correctly and measure of the correctly and measure of the correctly and measure of the correctly and operation operation operation of the correctly and operation operatio	s related to personal protecting a minimum efficiency of (%)		

08/08/2022 (Revision date) IE - en 45/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

2. Control of worker exposure: Mixing enerations (e	non systems) (PROCE)	
2.8. Control of worker exposure: Mixing operations (o PROC5 Mixing or blending in batch	<u>' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' </u>	
J J	просезово	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	es	
Supervision in place to check that the risk management recorrectly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.9. Control of worker exposure: Mixing operations (o	pen systems) (PROC5)	
PROC5 Mixing or blending in batch	h processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
<u>'</u>		
Amount used (or contained in articles), frequency an	· ·	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	es	
Provide a good standard of general ventilation (not less t	than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		90 %
Supervision in place to check that the risk management is correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
2.10. Control of worker exposure: Industrial spraying	(PROC7)	
PROC7 Industrial spraying		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	ad duration of use/exposure	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minute)	≤ 6 1/uay	
inioderate application rate (0.3 - 3 //minute)		
Technical and organisational conditions and measur		
Provide a good standard of general ventilation (not less t	than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		95 %
Surface spraying of liquids. Spraying with no or low comp	•	
Ensure that direction of application is only horizontal or d		
Supervision in place to check that the risk management recorrectly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
-		
Indoors,Assumes large workrooms Maximum process temperature		≤ 56 °C
Indoors,Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying	(PROC7)	≤ 56 °C
Indoors,Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying	(PROC7)	≤ 56 °C
Indoors, Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying	(PROC7)	≤ 56 °C
Indoors, Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying Product (article) characteristics	(PROC7)	≤ 56 °C
Indoors,Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying Product (article) characteristics Physical form of product		≤ 56 °C
Indoors, Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 %	≤ 56 °C
Indoors,Assumes large workrooms Maximum process temperature 2.11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and	Liquid ≤ 100 % ad duration of use/exposure	≤ 56 °C
Indoors,Assumes large workrooms Maximum process temperature 11. Control of worker exposure: Industrial spraying PROC7 Industrial spraying Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 %	≤ 56 °C

08/08/2022 (Revision date) IE - en 46/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Moderate application rate (0.	.3 - 3 l/minute)		
Technical and organisation	nal conditions and measur	res	
Surface spraying of liquids. S	Spraying with no or low com	pressed air use	
Ensure that direction of appli	ication is only horizontal or o	downward.	
		measures in place are being used	
correctly and operation cond			
		tion, hygiene and health evaluation	
Wear a respirator providing a	a minimum efficiency of (%):		90 % (APF 10)
Wear gloves providing a min	nimum efficiency of (%):		80 % (EN 374)
Other conditions affecting	workers exposure		
Indoors,Assumes large work	rooms,and/or,Outdoors,clos	e to buildings (< 4 m)	
Maximum process temperato	ure		≤ 56 °C
.12. Control of worker exp	osure: Transfer of substan	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or n	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles). frequency an	nd duration of use/exposure	
Exposure duration	u u,,que, u	≤ 8 h/day	
•	ual aauditiana aud waaa	,	
	nal conditions and measur		20.0/
Provide a good standard of (Efficiency	general ventilation (not less t	than 3 to 5 air changes per hour).	30 %
		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperato	ure		≤ 56 °C
.13. Control of worker exp	osure: Transfer of substar	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or n	mixture (charging and discharging) at r	on-dedicated facilities
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
	•	1	
Amount used (or contained	•	nd duration of use/exposure	
Amount used (or contained Exposure duration	d in articles), frequency an	nd duration of use/exposure ≤ 8 h/day	
Exposure duration Technical and organisation	d in articles), frequency an	nd duration of use/exposure ≤ 8 h/day res	
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check	d in articles), frequency an nal conditions and measur k that the risk management	nd duration of use/exposure ≤ 8 h/day	
Amount used (or contained Exposure duration Technical and organisation Supervision in place to chect correctly and operation cond	d in articles), frequency an nal conditions and measur k that the risk management litions followed.	nd duration of use/exposure ≤ 8 h/day res	
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures	d in articles), frequency an nal conditions and measur k that the risk management litions followed.	nd duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	90 %
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures	d in articles), frequency an nal conditions and measur k that the risk management litions followed.	nd duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	90 % (APF 10)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%):	nd duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor,and/or,Outdoor	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure	nd duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	(APF 10)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor,and/or,Outdoor	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure	nd duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	
Amount used (or contained Exposure duration Technical and organisation Supervision in place to chectorrectly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperate	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substar	nd duration of use/exposure	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker expenses	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substar	nd duration of use/exposure	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker expenses.	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substance or related to substance or related to personal protects a minimum efficiency of (%):	nd duration of use/exposure	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker experiences PROC8a Product (article) characterism	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substance or related to substance or related to personal protects a minimum efficiency of (%):	nd duration of use/exposure	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker expended. Product (article) characterical physical form of product	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substant Transfer of substance or relations.	nd duration of use/exposure S h/day res measures in place are being used tion, hygiene and health evaluation ace or mixture (charging and discharging) at no mixture (charging and discharging)	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker expensions and Conditions affecting indoor, and Control of worker expensions. 14. Control of worker expensions are concentration of substance in Concentration in Concen	d in articles), frequency and mal conditions and measur k that the risk management litions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substant Transfer of substance or relations.	ad duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation nce or mixture (charging and discharmixture (charging and discharging) at mixture (charging and dischargi	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker expensions and form of product (article) characteric Physical form of product Concentration of substance in Amount used (or contained	d in articles), frequency and mal conditions and measur k that the risk management litions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substant Transfer of substance or relations.	and duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation make or mixture (charging and discharmixture (charging and discharging) at not be a considered to the constant of the co	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperated. 14. Control of worker experiences PROC8a Product (article) character of Physical form of product Concentration of substance of Amount used (or contained Exposure duration	d in articles), frequency and mal conditions and measur k that the risk management ditions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substant Transfer of substance or relations. in product d in articles), frequency and	and duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation nce or mixture (charging and discharmixture (charging and discharging) at not liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)
Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation cond Conditions and measures Wear a respirator providing a Other conditions affecting indoor, and/or, Outdoor Maximum process temperate 1.14. Control of worker experience (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation	d in articles), frequency and mal conditions and measur k that the risk management litions followed. related to personal protect a minimum efficiency of (%): workers exposure ure osure: Transfer of substant Transfer of substance or not istics in product d in articles), frequency and mal conditions and measuremal	and duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation nce or mixture (charging and discharmixture (charging and discharging) at not liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	(APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)

08/08/2022 (Revision date) IE - en 47/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquic	Substance type: Mono-constituent	
Local exhaust ventilation - efficiency of at least		90 %
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
5.2.15. Control of worker exposure: Transfer of substar	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or r	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	res	
Provide a good standard of general ventilation (not less Efficiency	than 3 to 5 air changes per hour).	30 %
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
5.2.16. Control of worker exposure: Transfer of substar	· · · · · · · · · · · · · · · · · · ·	
PROC8b Transfer of substance or r	nixture (charging and discharging) at d	edicated facilities
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	res	
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 56 °C
5.2.17. Control of worker exposure: Transfer of substar PROC9)	nce or mixture into small containers	(dedicated filling line, including weighing)
PROC9 Transfer of substance or p	oreparation into small containers (dedic	ated filling line, including weighing)
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	res	
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 56 °C
5.2.18. Control of worker exposure: Roller application of		
PROC10 Roller application or brush	ning	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
09/09/2022 (Pavision data)		19/201

08/08/2022 (Revision date) IE - en 48/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	, ,	,,	
Amount used (or contained in a	articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisational c	onditions and measur	es	
Provide a good standard of gener	ral ventilation (not less t	than 1 to 3 air changes per hour)	
	t the risk management i	measures in place are being used	90 %
correctly and operation conditions			
Other conditions affecting work	kers exposure		
indoor Maximum process temperature			≤ 375 °C
Maximum process temperature	or Boller application o	r brushing (BBOC40)	2373 C
2.19. Control of worker exposure PROC10 Ro	ller application or brush		
		iii ig	
Product (article) characteristics	3		
Physical form of product		Liquid	
Concentration of substance in pro	oduct	≤ 100 %	
Amount used (or contained in a	articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisational c	onditions and measur	es	
Supervision in place to check that correctly and operation conditions		measures in place are being used	
Other conditions affecting work	kers exposure		
outdoor			
Maximum process temperature			≤ 320 °C
2.20. Control of worker exposure	e: Roller application o	r brushing (PROC10)	
PROC10 Ro	ller application or brush	ing	
Product (article) characteristics	3		
Physical form of product		Liquid	
Concentration of substance in pro	oduct	· ≤ 100 %	
Amount used (or contained in a	articles) frequency an	d duration of use/exposure	
Exposure duration	artiology, frequency an	≤ 8 h/day	
<u>'</u>	P.C	<u> </u>	
Technical and organisational c			20.07
Provide a good standard of gener Efficiency	,		30 %
Supervision in place to check that correctly and operation conditions		measures in place are being used	
Other conditions affecting world	kers exposure		
indoor			
Maximum process temperature			≤ 375 °C
2.21. Control of worker exposure	e: Roller application o	r brushing (PROC10)	
PROC10 Ro	ller application or brush	ing	
Product (article) characteristics	s		
Physical form of product		Liquid	
Concentration of substance in pro	oduct	· ≤ 100 %	
Amount used (or contained in a	articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisational c	onditions and moscur	<u> </u>	
	t the risk management i	measures in place are being used	
· ·		tion, hygiene and health evaluation	<u>'</u>
Wear a respirator providing a min			90 %
a respirator providing a filli			(APF 10)
	leave eveneering		
Other conditions affecting world	kers exposure		
Other conditions affecting work indoor,and/or,Outdoor	kers exposure		

08/08/2022 (Revision date) IE - en 49/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

2.22. Control of worker expos	sure: Treatment of article	s by dipping and pouring (PROC13)	
	Treatment of articles by di		
Product (article) characterist			
Physical form of product	lics	Liquid	
Concentration of substance in	product		
	•	≤ 100 %	
Amount used (or contained in	n articles), frequency an	•	
Exposure duration		≤ 8 h/day	
Technical and organisational			
	·	han 1 to 3 air changes per hour)	
Local exhaust ventilation - effic Supervision in place to check the correctly and operation condition	hat the risk management i	measures in place are being used	90 %
Other conditions affecting we	orkers exposure		
indoor			
Maximum process temperature	e		≤ 56 °C
2.23. Control of worker expos	ure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characterist	tics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
Amount used (or contained in	n articles), frequency an	d duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
Technical and organisational	I conditions and measur		
Efficiency	hat the risk management i	than 3 to 5 air changes per hour).	30 %
Other conditions affecting we	orkers exposure		
indoor			
Maximum process temperature	9		≤ 56 °C
		s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characterist	tics		
Physical form of product		Liquid	
Concentration of substance in p	product	≤ 100 %	
		= 100 70	
Amount used (or contained in	n articles), frequency an		
Amount used (or contained in Exposure duration	n articles), frequency an		
•	, , ,	d duration of use/exposure ≤ 8 h/day	
Exposure duration Technical and organisational	I conditions and measur hat the risk management I	d duration of use/exposure ≤ 8 h/day	
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions	I conditions and measur hat the risk management ons followed.	d duration of use/exposure ≤ 8 h/day es	
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions	I conditions and measur hat the risk management ons followed. lated to personal protect	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation	90 % (APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures relations.	I conditions and measur hat the risk management ons followed. lated to personal protect ninimum efficiency of (%):	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation	
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures rel Wear a respirator providing a measure of the conditions and measures.	I conditions and measur hat the risk management ons followed. lated to personal protect ninimum efficiency of (%):	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures rel Wear a respirator providing a module of the conditions affecting were	I conditions and measur hat the risk management ons followed. lated to personal protect minimum efficiency of (%):	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation	
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures relieve a respirator providing a monotonic organisation of the conditions affecting we indoor, and/or, Outdoor Maximum process temperature 2.25. Control of worker expositional	I conditions and measur hat the risk management rons followed. lated to personal protect ninimum efficiency of (%): orkers exposure	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13)	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures relieve a respirator providing a monotonic organisation of the conditions affecting we indoor, and/or, Outdoor Maximum process temperature 2.25. Control of worker expositional	I conditions and measur hat the risk management ons followed. lated to personal protect ninimum efficiency of (%): orkers exposure	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13)	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation condition Conditions and measures relieve a respirator providing a monotonic organisation of the conditions affecting we indoor, and/or, Outdoor Maximum process temperature 2.25. Control of worker expositional	I conditions and measur hat the risk management is ons followed. Iated to personal protect minimum efficiency of (%): orkers exposure estre: Treatment of article Treatment of articles by di	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13)	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions and measures relevant a respirator providing a modern and/or,Outdoor Maximum process temperature 2.25. Control of worker exposes process.	I conditions and measur hat the risk management is ons followed. Iated to personal protect minimum efficiency of (%): orkers exposure estre: Treatment of article Treatment of articles by di	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13)	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions. Conditions and measures relevant a respirator providing a modern of the conditions affecting we indoor, and/or, Outdoor Maximum process temperatures. 2.25. Control of worker expose PROC13 Product (article) characteristics.	I conditions and measur hat the risk management is ons followed. Iated to personal protect minimum efficiency of (%): orkers exposure sure: Treatment of article Treatment of articles by di tics	d duration of use/exposure S h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13) pping and pouring	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions. Conditions and measures relevant a respirator providing a modern of the conditions affecting we indoor, and/or, Outdoor Maximum process temperatures. PROC13 Product (article) characteristics.	I conditions and measur hat the risk management is ons followed. Iated to personal protect minimum efficiency of (%): orkers exposure estrest Treatment of article Treatment of articles by di tics	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13) pping and pouring Liquid ≤ 100 %	(APF 10)
Exposure duration Technical and organisational Supervision in place to check the correctly and operation conditions and measures relevant a respirator providing a modern and/or,Outdoor Maximum process temperature 2.25. Control of worker exposemble PROC13 Product (article) characterist Physical form of product Concentration of substance in product and organisation and organisa	I conditions and measur hat the risk management is ons followed. Iated to personal protect minimum efficiency of (%): orkers exposure estrest Treatment of article Treatment of articles by di tics	d duration of use/exposure ≤ 8 h/day es measures in place are being used tion, hygiene and health evaluation s by dipping and pouring (PROC13) pping and pouring Liquid ≤ 100 %	(APF 10)

08/08/2022 (Revision date) IE - en 50/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisation	onal conditions and measu	res	
Supervision in place to checcorrectly and operation con		measures in place are being used	
Other conditions affecting	g workers exposure		
outdoor			
Maximum process tempera	ture		≤ 56 °C
.26. Control of worker exp	oosure: Tabletting, compre	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression,	extrusion, pelettisation, granulation	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	, , , ,	≤ 8 h/day	
Technical and organisation	onal conditions and measu	res	
<u> </u>	ck that the risk management	measures in place are being used	
Conditions and measures	related to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%)	:	90 % (APF 10)
Other conditions affecting	g workers exposure		
Indoor,and/or,outdoor			
Maximum process tempera	ture		≤ 320 °C
.27. Control of worker exp	oosure: Tabletting, compre	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression,	extrusion, pelettisation, granulation	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	, ,	≤ 8 h/day	
Technical and organisation	onal conditions and measu	res	
	ck that the risk management	measures in place are being used	
Other conditions affecting	g workers exposure		
outdoor			
Maximum process tempera	ture		≤ 56 °C
.28. Control of worker exp	oosure: Tabletting, compre	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression,	extrusion, pelettisation, granulation	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	a, ii oquonoy ui	≤ 8 h/day	
•	onal conditions and measu	,	
		than 1 to 3 air changes per hour)	
Local exhaust ventilation -	`	3 / /	90 %
	ck that the risk management	measures in place are being used	
Other conditions affecting	g workers exposure		
indoor			≤ 56 °C
indoor Maximum process tempera	ture		-00 0
Maximum process tempera		ssion, extrusion, pelettisation, grant	

08/08/2022 (Revision date) IE - en 51/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	res	
Provide a good standard of general ventilation (not less		30 %
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		<u>'</u>
indoor		
Maximum process temperature		≤ 56 °C
2.30. Control of worker exposure: Laboratory activities	es (PROC15)	
PROC15 Use as laboratory reagent	t	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
<u>'</u>		
Amount used (or contained in articles), frequency ar		
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	res	
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 56 °C
2.31. Control of worker exposure: Manual activities in	volving hand contact (PROC19)	
PROC19 Manual activities involving	g hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	ros	
Provide a good standard of general ventilation (not less		
	than 1 to 3 an changes per nour)	90 %
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	90 %
Conditions and measures related to personal protect	tion, hygiene and health evaluation	
Wear gloves providing a minimum efficiency of (%):		80 % (EN 374)
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
maximum process temperature	volving hand contact (PPOC19)	
.32. Control of worker exposure: Manual activities in		
.32. Control of worker exposure: Manual activities in		
2.32. Control of worker exposure: Manual activities in PROC19 Manual activities involving		
32. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics		
32. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product	g hand contact	
	y hand contact Liquid ≤ 100 %	
PROC19 Manual activities in Manual activities in Manual activities involving Manual activities involving Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are	y hand contact Liquid ≤ 100 %	
PROC19 Manual activities in Manual activities in Manual activities involving Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency ar Exposure duration	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day	
	by hand contact Liquid ≤ 100 % Indicate the standard description of use/exposure ≤ 8 h/day Liquid Standard description of use/exposure Standard description of use/exposure	

08/08/2022 (Revision date) IE - en 52/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Wear gloves providing a	minimum efficiency of (%):		80 % (EN 374)
Other conditions affecting workers exposure			(EN 374)
outdoor	ing workers exposure		
Maximum process tempe	rature		≤ 56 °C
' '	exposure: Manual activities invo	lying hand contact (PROC19)	1 - 00 - 0
PROC19	Manual activities involving ha	``	
Product (article) charac			
Physical form of product		_iquid	
Concentration of substan		≤ 100 %	
Exposure duration	ned in articles), frequency and	s 8 h/day	
•			
<u> </u>	tional conditions and measures		
Provide a good standard Efficiency	of general ventilation (not less tha	in 3 to 5 air changes per hour).	30 %
	neck that the risk management me conditions followed.	easures in place are being used	
	· · · · · · · · · · · · · · · · · · ·	n, hygiene and health evaluation	
Wear gloves providing a	minimum efficiency of (%):		80 % (EN 274)
Other conditions offers	ing workers evacure		(EN 374)
Other conditions affecting	ing workers exposure		
maximum process tempe	ratura		≤ 56 °C
		nd maintenance (PROC8a, PROC	
PROC8a		ture (charging and discharging) at r	<u>'</u>
PROC28	Manual maintenance (cleaning	· · · · · · · · · · · · · · · · · · ·	on dedicated radinates
	,	ing and repair) or macrimory	
Product (article) charac		in tid	
Physical form of product Concentration of substan		_iquid ≤ 100 %	
	ned in articles), frequency and		
Exposure duration		≤ 8 h/day	
	tional conditions and measures		
Supervision in place to che correctly and operation co	neck that the risk management me	easures in place are being used	
		n, hygiene and health evaluation	
	ng a minimum efficiency of (%):	ii, iiygiene and nealth evaluation	90 %
vvcar a respirator providir	ig a minimum emelency or (70).		(APF 10)
Other conditions affect	ng workers exposure		
indoor,and/or,Outdoor			
Maximum process tempe	rature		≤ 56 °C
.35. Control of worker e	exposure: Equipment cleaning a	nd maintenance (PROC8a, PROC	28)
PROC8a	Transfer of substance or mix	ture (charging and discharging) at r	on-dedicated facilities
PROC28	Manual maintenance (cleaning	ng and repair) of machinery	
Product (article) charac	teristics		
Physical form of product	L	_iquid	
Concentration of substance in product ≤ 100 %			
Amount used (or contained in articles), frequency and duration of use/exposure			
Exposure duration	,, , , , , , , , , , , , , , , , , , ,	≤ 8 h/day	
		•	
Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). 30 %			
	or general vertiliation (not less tha	3	

08/08/2022 (Revision date) IE - en 53/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

indoor					
Maximum process t	temperature		≤ 56 °C		
5.2.36. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)					
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities					
PROC28	Manual maintenance (c	leaning and repair) of machinery			
Product (article) c	haracteristics				
Physical form of product		Liquid			
Concentration of su	bstance in product	≤ 100 %			

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

Other conditions affecting workers exposure

outdoor

Maximum process temperature ≤ 56 °C

5.2.37. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC28	Manual maintenance (cleaning and repair) of machinery

Product (article) characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least	90 %
Supervision in place to check that the risk management measures in place are being used	
correctly and operation conditions followed.	

Other conditions affecting workers exposure

indoor	
Maximum process temperature	≤ 56 °C

5.3. Exposure estimation and reference to its source

5.3.1. Environmental release and exposure Uses in Coatings (ERC4)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	2 %	ESVOC SPERC 4.3a.v1
Release to waste water from process	800 kg/day	ESVOC SPERC 4.3a.v1
Release fraction to air from process	9.8 %	ESVOC SPERC 4.3a.v1
Release to air from process	3920 kg/day	ESVOC SPERC 4.3a.v1
Release fraction to soil from process	0 %	ESVOC SPERC 4.3a.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	5.729	10.6	0.54	EUSES v2.1.2
Marine water	mg/l	0.568	1.06	0.536	EUSES v2.1.2
Freshwater sediment	mg/kg	25.13	30.4	0.827	EUSES v2.1.2
Marine water sediment	mg/kg	2.491	3.04	0.819	EUSES v2.1.2
Sewage treatment plant	mg/l	49.81	100	0.498	EUSES v2.1.2
Soil	mg/kg	0.859	29.5	0.029	EUSES v2.1.2

08/08/2022 (Revision date) IE - en 54/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

5.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent
containment conditions: Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m ³	0	ECETOC TRA worker

5.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

5.3.4. Worker exposure Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

5.3.5. Worker exposure Chemical production where opportunity for exposure arises (PROC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.237	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

5.3.6. Worker exposure Mixing operations (open systems) (PROC5)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

5.3.7. Worker exposure Mixing operations (open systems) (PROC5)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

5.3.8. Worker exposure Mixing operations (open systems) (PROC5)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 55/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.9. Worker exposure Mixing op	erations (open systems) (PROC5		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
3.10. Worker exposure Industria	al spraying (PROC7)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.142 mg/kg bw/day	0.012	ECETOC TRA worker
Inhalation - Long-term - systemic effects	5.5 mg/m ³	0.005	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects		0.017	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
3.11. Worker exposure Industria			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	8.572 mg/kg bw/day	0.046	ECETOC TRA worker
Inhalation - Long-term - systemic effects	1000 mg/m³	0.826	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects	40.4 / 2	0.872	ECETOC TRA worker
Acute - Local - Inhalation	484 mg/m³	ng and discharging) at non-dedicated	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects	1690 mg/m³	0.424	ECETOC TRA worker
	-	ng and discharging) at non-dedicated	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
· ·	of substance or mixture (charging	ng and discharging) at non-dedicated	facilities (PROC8a)
Route of exposure and type	Exposure estimate	RCR	Method
of effects		0.007	ECETOC TRA worker
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day		
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	1.371 mg/kg bw/day 60.5 mg/m³	0.05	ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term -	,		ECETOC TRA worker

08/08/2022 (Revision date) IE - en 56/265

oute of exposure and type	Exposure estimate	RCR	on-dedicated facilities (PROC8a) Method
effects	·		
ermal - Long-term - systemic fects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
halation - Long-term - stemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
um RCR - Long-term - ystemic effects		0.424	
cute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
16. Worker exposure Transfer			
oute of exposure and type f effects	Exposure estimate	RCR	Method
Permal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - ystemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - ystemic effects		0.374	
cute - Local - Inhalation	1450 mg/m ³	0.599	ECETOC TRA worker
7. Worker exposure Transfer	of substance or mixture into	small containers (dedicated	d filling line, including weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic offects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
nhalation - Long-term - ystemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - ystemic effects		0.437	
cute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
18. Worker exposure Roller ap	oplication or brushing (PROC	(10)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Permal - Long-term - systemic Iffects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
nhalation - Long-term - ystemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - ystemic effects		0.197	
cute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
19. Worker exposure Roller ap			
toute of exposure and type feffects	Exposure estimate	RCR	Method
Permal - Long-term - systemic ffects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
nhalation - Long-term - ystemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - ystemic effects		0.497	
cute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker
20. Worker exposure Roller ap	·		
toute of exposure and type feffects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic iffects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
nhalation - Long-term - ystemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - ystemic effects		0.497	
cute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker
21. Worker exposure Roller ap	oplication or brushing (PROC	310)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic offects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
hhalation - Long-term -	60.5 mg/m ³	0.05	ECETOC TRA worker

Sum RCR - Long-term -		0.197	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	nt of articles by dipping and pouring	g (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
5.3.23. Worker exposure Treatme	nt of articles by dipping and pouring	g (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	nt of articles by dipping and pouring	- `	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040 / 2	0.124	FOFTOO TDA
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	nt of articles by dipping and pouring		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects	1000 m m/m3		ECETOC TRA worker
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA Worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.068	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	g, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1600 mg/m³	0.368	ECETOC TDA worker
	1690 mg/m ³ ng, compression, extrusion, pelettise	ation granulation (PROC14)	ECETOC TRA worker
			Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.343 mg/kg bw/day	0.002	ECETOC TRA worker

Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.052	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
5.3.29. Worker exposure Tablettin	g, compression, extrusion, pelettis	sation, granulation (PROC14)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000 / 2	0.368	EOFTOO TDA
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
5.3.30. Worker exposure Laborato			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³	0.102	ECETOC TRA worker
	activities involving hand contact (P		EGETGG TRA WORKER
·		RCR	Method
Route of exposure and type of effects	Exposure estimate		
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.202	
	2/12 mg/m ³	0.1	ECETOC TRA worker
Acute - Local - Inhalation	242 mg/m³	0.1 ROC19)	ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a	activities involving hand contact (P	ROC19)	
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects	activities involving hand contact (P Exposure estimate	ROC19) RCR	Method
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day	ROC19) RCR 0.152	Method ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	activities involving hand contact (P Exposure estimate	ROC19) RCR 0.152 0.35	Method
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	ectivities involving hand contact (PExposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502	Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698	Method ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	ectivities involving hand contact (PExposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698	Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a	activities involving hand contact (PExposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.34. Worker exposure Equipme Route of exposure and type of effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 13.71 mg/kg bw/day	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698 0.698 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects	28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (PExposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ and contact (PExposure estimate) 28.29 mg/kg bw/day	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698 0.698 0.698 0.698 0.698 0.68a, PROC28) RCR 0.074 0.05	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698 0C8a, PROC28) RCR 0.074 0.05 0.124	Method ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 5.3.32. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.33. Worker exposure Manual a Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 5.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 28.29 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ activities involving hand contact (P Exposure estimate 13.71 mg/kg bw/day	ROC19) RCR 0.152 0.35 0.502 0.698 ROC19) RCR 0.152 0.35 0.502 0.698 0.698 0.698 0.698 0.698 0.68a, PROC28) RCR 0.074 0.05	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
36. Worker exposure Equipme	ent cleaning and maintenanc	e (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.37. Worker exposure Equipme	ent cleaning and maintenanc	e (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
. Guidance to Downstre	am User to evaluate wh	nether he works inside	the boundaries set by the ES
1. Environment			
Guidance - Environment			which may not be applicable to all sites; thus, pecific risk management measures
2. Health			
Guidance - Health	No additional risk mana		ose that are mentioned above, are needed to

08/08/2022 (Revision date) IE - en 60/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

6. AC SE06: Use as binders and release agents

Use as binders and release agents		ES Ref.: A ES Type		Association ref code: IS
		L3 Туре	VVOIREI	
Environment				
CS 1	Use as binders and release age	nts	ERC5	
Worker				
CS 2	Use in closed process; Storage		PROC1	
CS 3	Chemical production or refinery process with occasional controlle with equivalent containment con	ed exposure or processes	PROC2	
CS 4	Use in closed batch process (syn With occasional controlled expos		PROC3	
CS 5	Chemical production where opporarises	ortunity for exposure	PROC4	
CS 6	Mixing operations (open system	s)	PROC5	
CS 7	Mixing operations (open systems	s)	PROC5	
CS 8	Mixing operations (open systems	s)	PROC5	
CS 9	Mixing operations (open systems	s)	PROC5	
CS 10	Calendering (including Banburys	s)	PROC6	
CS 11	Calendering (including Banburys		PROC6	
CS 12	Calendering (including Banburys	s)	PROC6	
CS 13	Calendering (including Banburys	s)	PROC6	
CS 14	Industrial spraying		PROC7	
CS 15	Industrial spraying		PROC7	
CS 16	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 17	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 18	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 19	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 20	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 21	Transfer of substance or mixture (dedicated filling line, including v		PROC9	
CS 22	Roller application or brushing		PROC10	
CS 23	Roller application or brushing		PROC10	
CS 24	Roller application or brushing		PROC10	
CS 25	Roller application or brushing		PROC10	
CS 26	Treatment of articles by dipping	and pouring	PROC13	
CS 27	Treatment of articles by dipping	and pouring	PROC13	
CS 28	Treatment of articles by dipping	and pouring	PROC13	
CS 29	Treatment of articles by dipping	and pouring	PROC13	
CS 30	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 31	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 32	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 33	Equipment cleaning and mainter	nance	PROC8a, PROC28	
Processes, tasks, activiti	es covered Use at industrial :	sites (IC)		

6.2. Conditions of use affecting exposure

6.2.1. Control of environmental exposure: Us	le as binders and release adents (ERC5)

ERC5	Use at industrial site leading to inclusion into/onto article				
Amount used, frequency ar	Amount used, frequency and duration of use (or from service life)				
Daily amount per site	≤ 1.5 t/d				
Annual site tonnage (tons/ye	ar): ≤ 30 t/yr				

08/08/2022 (Revision date) IE - en 61/265

Conditions and measures			
Assumed domestic sewage Sludge treatment technique	•	≥ 2000 m³/d Controlled application to agricultural s	eoil
		aste (including article waste)	5011
Dispose of waste in accordal legislation		aste (including article waste)	
.2. Control of worker expo	sure: Use in closed proc	ess; Storage (PROC1)	
PROC1	Chemical production or containment conditions	refinery in closed process without likeliho	od of exposure or processes with equivalent
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and meas	ures	
Chemical production or refinwith equivalent containment	ery in closed process with conditions k that the risk managemen	out likelihood of exposure or processes	
Other conditions affecting	workers exposure		
ndoor,and/or,outdoor			
Maximum process temperat	ure		≤ 56 °C
.3. Control of worker expocesses with equivalent co			ocess with occasional controlled exposure
PROC2	Chemical production or with equivalent containm		n occasional controlled exposure or processes
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and meas	ures	
exposure or processes with	equivalent containment co k that the risk managemen	rocess with occasional controlled nditions It measures in place are being used	
Other conditions affecting			
indoor,and/or,Outdoor			
Maximum process temperat	ure		≤ 56 °C
.4. Control of worker expo	sure: Use in closed batcl	h process (synthesis or formulation); \	With occasional controlled exposure (PROC
PROC3		ion in the chemical industry in closed bate alent containment condition	ch processes with occasional controlled exposi
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe Exposure duration	d in articles), frequency a	and duration of use/exposure ≤ 8 h/day	
•	ual aauditissa suuluu	,	
Fechnical and organisation			
<u> </u>	k that the risk managemen	With occasional controlled exposure t measures in place are being used	
Other conditions affecting			
	Oxpoodio		
ndoor.ang/or.outdoor			
indoor,and/or,outdoor Maximum process temperat	ure		≤ 56 °C
Maximum process temperat		on where opportunity for exposure ari	

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measu	res	
Supervision in place to check that the risk management	measures in place are being used	
correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,outdoor Maximum process temperature		≤ 56 °C
2.6. Control of worker exposure: Mixing operations (c	onen systems) (PROC5)	2 30 C
PROC5 Mixing or blending in batc	<u> </u>	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar		
Exposure duration	≤ 8 h/day	
<u>'</u>	,	
Technical and organisational conditions and measure		
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Conditions and measures related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%)	:	90 %
		(APF 10)
Other conditions affecting workers exposure		
indoor,and/or,outdoor		≤ 56 %
Maximum process temperature 2.7. Control of worker exposure: Mixing operations (c	anon systems) (PROCE)	≥ 30 76
PROC5 Mixing or blending in bate		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar		
Amount used (or contained in articles), frequency ar	iu uuralion oi use/exposure	
, , , ,	•	
Exposure duration	≤ 8 h/day	
Exposure duration Technical and organisational conditions and measure	≤ 8 h/day res	20.97
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency	≤ 8 h/day res than 3 to 5 air changes per hour).	30 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management	≤ 8 h/day res than 3 to 5 air changes per hour).	30 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed.	≤ 8 h/day res than 3 to 5 air changes per hour).	30 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management	≤ 8 h/day res than 3 to 5 air changes per hour).	30 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure	≤ 8 h/day res than 3 to 5 air changes per hour).	30 % ≤ 56 °C
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor	≤ 8 h/day res than 3 to 5 air changes per hour). measures in place are being used	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	≤ 8 h/day res than 3 to 5 air changes per hour). measures in place are being used open systems) (PROC5)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (control of worker exposure)	≤ 8 h/day res than 3 to 5 air changes per hour). measures in place are being used open systems) (PROC5)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5) Mixing or blending in bate	≤ 8 h/day res than 3 to 5 air changes per hour). measures in place are being used open systems) (PROC5)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5 Mixing or blending in batch Product (article) characteristics	≤ 8 h/day res than 3 to 5 air changes per hour). measures in place are being used open systems) (PROC5) th processes	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (conditions) PROC5 Mixing or blending in battors of product (article) characteristics Physical form of product	ses than 3 to 5 air changes per hour). measures in place are being used per systems) (PROC5) th processes Liquid ≤ 100 %	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5 Mixing or blending in batter Product (article) characteristics Physical form of product Concentration of substance in product	ses than 3 to 5 air changes per hour). measures in place are being used per systems) (PROC5) th processes Liquid ≤ 100 %	
Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5 Mixing or blending in batch Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration	ses than 3 to 5 air changes per hour). measures in place are being used pen systems) (PROC5) the processes Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5 Mixing or blending in bate Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are	ses than 3 to 5 air changes per hour). measures in place are being used ppen systems) (PROC5) th processes Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res	
Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (of PROC5 Mixing or blending in bate) Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure	ses than 3 to 5 air changes per hour). measures in place are being used ppen systems) (PROC5) th processes Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res	
Technical and organisational conditions and measure Provide a good standard of general ventilation (not less Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations (or PROC5 Mixing or blending in bate Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less	sthan 3 to 5 air changes per hour). measures in place are being used ppen systems) (PROC5) th processes Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res than 1 to 3 air changes per hour)	≤ 56 °C

Other conditions affecting workers	exposure	
Maximum process temperature		< 56 °C
Maximum process temperature	ing anarations (anan austama) (BROCE)	≤ 56 °C
<u> </u>	ring operations (open systems) (PROC5) or blending in batch processes	
	or biending in batch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
•	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational condi	tions and measures	
Supervision in place to check that the correctly and operation conditions follo	risk management measures in place are being used owed.	
Other conditions affecting workers	exposure	
outdoor		
Maximum process temperature		≤ 320 °C
<u> </u>	alendering (including Banburys) (PROC6)	
	ering operations	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in article	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational condit	tions and measures	
Supervision in place to check that the correctly and operation conditions follows:	risk management measures in place are being used owed.	
Conditions and measures related to	personal protection, hygiene and health evaluation	on
Wear a respirator providing a minimun	n efficiency of (%):	90 % (APF 10)
Other conditions affecting workers	exposure	
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
•	alendering (including Banburys) (PROC6)	
	ering operations	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in article	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
	tions and measures	
Technical and organisational condi	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).	
Provide a good standard of general ve Efficiency	, , ,	30 %
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo	risk management measures in place are being used owed.	30 %
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers	risk management measures in place are being used owed.	30 %
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor	risk management measures in place are being used owed.	
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor Maximum process temperature	risk management measures in place are being used owed. exposure	30 % ≤ 56 °C
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor Maximum process temperature12. Control of worker exposure: Ca	risk management measures in place are being used owed. exposure alendering (including Banburys) (PROC6)	
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor Maximum process temperature12. Control of worker exposure: Ca	risk management measures in place are being used owed. exposure	
Provide a good standard of general ve Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor Maximum process temperature 2.12. Control of worker exposure: Ca PROC6 Calenda Product (article) characteristics	risk management measures in place are being used owed. exposure alendering (including Banburys) (PROC6)	
Efficiency Supervision in place to check that the correctly and operation conditions follo Other conditions affecting workers indoor Maximum process temperature 2.12. Control of worker exposure: Ca	risk management measures in place are being used owed. exposure alendering (including Banburys) (PROC6) ering operations Liquid	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained in articles), frequ	ency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	measures	
Supervision in place to check that the risk manage correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
.13. Control of worker exposure: Calendering	(including Banburys) (PROC6)	
PROC6 Calendering opera	ations	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequ	ency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
·	,	
Technical and organisational conditions and Provide a good standard of general ventilation (r		
Local exhaust ventilation - efficiency of at least	iot less than 1 to 3 all changes per noul)	90 %
Supervision in place to check that the risk manage correctly and operation conditions followed.	gement measures in place are being used	30 //
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
.14. Control of worker exposure: Industrial s	oraying (PROC7)	
PROC7 Industrial spraying	I	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	· ≤ 100 %	
Amount used (or contained in articles), frequ	ency and duration of use/exposure	
Exposure duration	≤ 8 h/dav	
Moderate application rate (0.3 - 3 l/minute)	_ C 1, day	
, , , , , , , , , , , , , , , , , , , ,		
Technical and organisational conditions and Surface spraying of liquids. Spraying with no or l		
Ensure that direction of application is only horizo	<u>'</u>	
Supervision in place to check that the risk manage correctly and operation conditions followed.		
Conditions and measures related to personal	protection, hygiene and health evaluation	on
Wear a respirator providing a minimum efficiency	y of (%):	90 %
Wear gloves providing a minimum efficiency of (%):	(APF 10) 80 % (EN 374)
Other conditions affecting workers exposure		(,
Indoors,Assumes large workrooms,and/or,Outdo		
Maximum process temperature		≤ 56 °C
.15. Control of worker exposure: Industrial s	oraying (PROC7)	
PROC7 Industrial spraying	1	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequ		
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minute)	- 0 i v day	
, , , , , , , , , , , , , , , , , , , ,		
Technical and organisational conditions and Provide a good standard of general ventilation (r		

08/08/2022 (Revision date) IE - en 65/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Local exhaust ventilation - efficiency of at least Surface spraying of liquids. Spraying with no or low compressed air use			95 %
Ensure that direction of application is only horizontal or downward.			
• • • • • • • • • • • • • • • • • • • •	ck that the risk management	measures in place are being used	
Other conditions affecting			
Indoors, Assumes large wor	•		
Maximum process tempera			≤ 56 °C
		ace or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at n	
		mixture (charging and discharging) at r	ion-acdicated facilities
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance in product ≤ 100		≤ 100 %	
Amount used (or containe	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measur	es	
Provide a good standard of	general ventilation (not less t	than 3 to 5 air changes per hour).	30 %
Efficiency	als that the vials management	manayana in mlana ara baina yana	
Supervision in place to cher correctly and operation con		measures in place are being used	
Other conditions affecting			·
indoor	,		
Maximum process tempera	ture		≤ 56 °C
		ice or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at n	
		, 3 3 3 5 6/	
Product (article) characte	risucs	Liquid	
Physical form of product Concentration of substance	in product	Liquid ≤ 100 %	
	•		
Amount used (or containe Exposure duration	ed in articles), frequency an	d duration of use/exposure ≤ 8 h/day	
•	unal agustitiana and magain	•	
		measures in place are being used	
, '		tion, hygiene and health evaluation	
	a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		(10)
indoor,and/or,outdoor	1 I JI NOI O GAPOGUIG		
Maximum process tempera	ture		≤ 320 °C
		ice or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at r	
		and also larging at t	
Product (article) characte	HSUCS	Liquid	
Physical form of product	in product	Liquid	
Concentration of substance	•	≤ 100 %	
Amount used (or containe Exposure duration	ed in articles), frequency an	d duration of use/exposure ≤ 8 h/day	
•			
	onal conditions and measur		20.0/
Efficiency Supervision in place to chec	ck that the risk management	than 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation con	ditions followed.		
·			
Other conditions affecting	g workers exposure		
·	g workers exposure		

08/08/2022 (Revision date) IE - en 66/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	Transfer of substance or	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance in product ≤ 100 %			
	•		
·	ed in articles), frequency a	and duration of use/exposure ≤ 8 h/day	
Exposure duration		,	
	onal conditions and measu		
	<u> </u>	s than 1 to 3 air changes per hour)	
Local exhaust ventilation - Supervision in place to che correctly and operation cor	eck that the risk managemen	t measures in place are being used	90 %
Other conditions affectin	g workers exposure		
indoor			
Maximum process tempera	ature		≤ 56 °C
.20. Control of worker ex	posure: Transfer of substa	ance or mixture (charging and discha	rging) at dedicated facilities (PROC8b)
PROC8b		mixture (charging and discharging) at d	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
	•		
· ·	ed in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measu	ures	
Supervision in place to che correctly and operation cor	•	t measures in place are being used	
Other conditions affecting	g workers exposure		
indoor,and/or,outdoor			
Maximum process tempera	ature		≤ 56 °C
Maximum process tempera		ance or mixture into small containers	≤ 56 °C (dedicated filling line, including weighing)
2.21. Control of worker ex ROC9)		nnce or mixture into small containers	
2.21. Control of worker ex ROC9)	posure: Transfer of substa	nnce or mixture into small containers preparation into small containers (dedic	(dedicated filling line, including weighing)
2.21. Control of worker ex ROC9) PROC9	posure: Transfer of substance or		(dedicated filling line, including weighing)
2.21. Control of worker ex ROC9) PROC9 Product (article) characte	posure: Transfer of substance or		(dedicated filling line, including weighing)
2.21. Control of worker ex ROC9) PROC9 Product (article) character Physical form of product	Transfer of substance or eristics	preparation into small containers (dedic	(dedicated filling line, including weighing)
PROC9 Product (article) characte Physical form of product Concentration of substance	Transfer of substance or eristics	preparation into small containers (dedices Liquid ≤ 100 %	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain	Transfer of substance or eristics	preparation into small containers (dedice Liquid ≤ 100 % and duration of use/exposure	(dedicated filling line, including weighing)
PROC9 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration	Transfer of substance or eristics e in product ed in articles), frequency a	preparation into small containers (dediction of the containers (dediction	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to che	Transfer of substance or eristics e in product ed in articles), frequency a onal conditions and measured that the risk management	preparation into small containers (dediction of the containers (dediction	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation correctly	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed.	preparation into small containers (dediction of the latest property	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to checorrectly and operation cor Other conditions affectin	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed.	preparation into small containers (dediction of the latest property	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affectin indoor,and/or,Outdoor	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk managemen aditions followed. g workers exposure	preparation into small containers (dediction of the latest property	(dedicated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to checorrectly and operation cor Other conditions affectine indoor, and/or, Outdoor Maximum process temperation	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk managemen aditions followed. g workers exposure	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day ures t measures in place are being used	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affectin indoor,and/or,Outdoor Maximum process tempera	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed. g workers exposure	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day ures t measures in place are being used or brushing (PROC10)	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to checorrectly and operation cor Other conditions affecting indoor, and/or, Outdoor Maximum process temperations. PROC10	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed. g workers exposure eture posure: Roller application Roller application or brus	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day ures t measures in place are being used or brushing (PROC10)	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC10 Product (article) character concentration of substance content and organisation correctly and operation correctly control of worker expression of content con	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed. g workers exposure eture posure: Roller application Roller application or brus	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day cures to measures in place are being used or brushing (PROC10) shing	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC9 Product (article) character concentration of substance concentration concentration concentration concentration in place to che correctly and operation correctly control of worker expression of concentration of concentration of product (article) character physical form of product	Transfer of substance or eristics e in product ed in articles), frequency a conal conditions and measured that the risk management additions followed. g workers exposure ature posure: Roller application Roller application or bruseristics	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day ures t measures in place are being used or brushing (PROC10) shing Liquid	(dedicated filling line, including weighing) eated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to che correctly and operation affecting indoor, and/or, Outdoor Maximum process temperature. PROC10 Product (article) character Physical form of product Concentration of substance and concentration of substance are concentration of substance and concentration of substance are concentration.	Transfer of substance or Pristics e in product ed in articles), frequency and conditions and measured that the risk management anditions followed. g workers exposure eature posure: Roller application Roller application or brusteristics e in product	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day stress to measures in place are being used or brushing (PROC10) shing Liquid ≤ 100 %	(dedicated filling line, including weighing) eated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to checorrectly and operation correctly and operation affecting indoor, and/or, Outdoor Maximum process temperate PROC10 Product (article) character Physical form of product Concentration of substance and articles are also as a substance of the concentration of of the concentratio	Transfer of substance or Pristics e in product ed in articles), frequency and conditions and measured that the risk management anditions followed. g workers exposure eature posure: Roller application Roller application or brusteristics e in product	preparation into small containers (dediction of Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day ures t measures in place are being used or brushing (PROC10) shing Liquid	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to che correctly and operation affecting indoor, and/or, Outdoor Maximum process temperated. PROC10 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration	Transfer of substance or Pristics e in product ed in articles), frequency and conditions and measured that the risk management anditions followed. g workers exposure eature posure: Roller application Roller application or brusteristics e in product	preparation into small containers (dediction of the containers (dediction	(dedicated filling line, including weighing) cated filling line, including weighing)
PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to che correctly and operation and product Control of worker exprocured (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation)	Transfer of substance or cristics e in product ed in articles), frequency act that the risk management additions followed. g workers exposure ature posure: Roller application Roller application or brusteristics e in product ed in articles), frequency act that the risk management additions followed.	preparation into small containers (dediction of the containers (dediction	(dedicated filling line, including weighing) eated filling line, including weighing)

08/08/2022 (Revision date) IE - en 67/265

	on conditions followed.			
	fecting workers exposure)		
indoor				
Maximum process ter			≤ 56 °C	
		ication or brushing (PROC10)		
PROC10	Roller application	or brushing		
Product (article) cha	aracteristics			
Physical form of prod	luct	Liquid		
Concentration of subs	stance in product	≤ 100 %		
Amount used (or co	ontained in articles), frequ	ency and duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organ	nisational conditions and	measures		
Supervision in place t		gement measures in place are being used		
Other conditions aff	fecting workers exposure)		
outdoor	<u> </u>			
Maximum process ter	mperature		≤ 320 °C	
· ·		ication or brushing (PROC10)		
PROC10	Roller application			
Product (article) cha		-		
Physical form of prod		Liquid		
Concentration of subs		≤ 100 %		
	•			
•	ontained in articles), frequ	ency and duration of use/exposure		
	nisational conditions and dard of general ventilation (r	≤ 8 h/day I measures not less than 3 to 5 air changes per hour).	30 %	
Technical and organe Provide a good stand Efficiency Supervision in place to correctly and operation	lard of general ventilation (r	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used	30 %	
Technical and organe Provide a good stand Efficiency Supervision in place to correctly and operation	dard of general ventilation (reto check that the risk mana on conditions followed.	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used	30 %	
Technical and organe Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions aff	dard of general ventilation (reto check that the risk mana on conditions followed.	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used	30 % ≤ 56 °C	
Technical and organerovide a good standerover Supervision in place to correctly and operation of the conditions affindoor Maximum process terms.	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used		
Technical and organerovide a good standerover Supervision in place to correctly and operation of the conditions affindoor Maximum process terms.	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used		
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process teles.25. Control of works	dard of general ventilation (reto check that the risk manal on conditions followed. fecting workers exposure mperature Roller application	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used		
Technical and organerovide a good stand Efficiency Supervision in place of correctly and operation of the conditions affindoor Maximum process teres. PROC10	dard of general ventilation (reto check that the risk manal on conditions followed. fecting workers exposure mperature ser exposure: Roller application aracteristics	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used		
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process terms. 25. Control of work PROC10 Product (article) characteristics and organization of the conditions affind or the conditions affind organization of the conditions affind organization of the conditions affind organization of the condition of the condit	dard of general ventilation (reto check that the risk manal on conditions followed. fecting workers exposure mperature ker exposure: Roller appliation aracteristics	measures not less than 3 to 5 air changes per hour). gement measures in place are being used cation or brushing (PROC10) or brushing		
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process teres. Control of work PROC10 Product (article) characteristics of subsections of subsections of subsections and organization organization of subsections and organization organiz	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Roller application aracteristics luct stance in product	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 %		
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process teres. Control of work PROC10 Product (article) characteristics of subsections of subsections of subsections and organization organization of subsections and organization organiz	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Roller application aracteristics luct stance in product	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid		
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation of the conditions affindoor Maximum process telescent of work PROC10 Product (article) charenerom of product concentration of substandard was a concentration of substandard or concentration or concentration of substandard or concentration	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Roller application aracteristics luct stance in product	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % ILIQUID LIQUID Selency and duration of use/exposure ≤ 8 h/day		
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process telescent PROC10 Product (article) chare Physical form of product Concentration of substandard Maximum used (or concentration of substandard Product (article) chare Physical form of	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Rer exposure: Roller application aracteristics duct stance in product contained in articles), frequenciational conditions and	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % ILIQUID LIQUID Selency and duration of use/exposure ≤ 8 h/day		
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process telegation Product (article) characteristical form of product (article) characteristical form of substance duration Technical and organ Supervision in place to correctly and operation	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Refer exposure: Roller applial Roller application aracteristics duct stance in product contained in articles), frequentiational conditions and to check that the risk mana on conditions followed.	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % Idency and duration of use/exposure ≤ 8 h/day	≤ 56 °C	
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process term. 25. Control of work PROC10 Product (article) characteristical form of product concentration of substandard with the conditions and measure of the correctly and operation Conditions and measure of the conditions and measure of the conditions and measure correctly and operation Conditions and	dard of general ventilation (reto check that the risk mana on conditions followed. fecting workers exposure mperature Refer exposure: Roller applial Roller application aracteristics duct stance in product contained in articles), frequentiational conditions and to check that the risk mana on conditions followed.	measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Cation or brushing (PROC10) or brushing Liquid ≤ 100 % Liency and duration of use/exposure ≤ 8 h/day I measures Igement measures in place are being used Il protection, hygiene and health evaluation	≤ 56 °C	
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process term. 25. Control of work PROC10 Product (article) characteristical form of product (article) concentration of substantial form of product (article) concentration of product (article) concentration of product (article) concentration of substantial form of product (article) concentration of product (article) concentration of product (article) concentration of product (article) concentration of product (article) characteristical form of product (article) cha	to check that the risk mana on conditions followed. fecting workers exposure mperature Roller application aracteristics luct stance in product ontained in articles), frequentiational conditions and to check that the risk mana on conditions followed. asures related to persona	I measures not less than 3 to 5 air changes per hour). Ingement measures in place are being used I cation or brushing (PROC10) or brushing Liquid ≤ 100 % I measures I gement measures in place are being used I measures I measures I measures I measures in place are being used I protection, hygiene and health evaluation by of (%):	≤ 56 °C	
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process telescapes to the Control of work PROC10 Product (article) characteristical form of product (arti	to check that the risk mana- on conditions followed. fecting workers exposure mperature ker exposure: Roller applia Roller application aracteristics fuct stance in product ontained in articles), frequentiations and to check that the risk mana- on conditions followed. asures related to personal aviding a minimum efficience.	I measures not less than 3 to 5 air changes per hour). Ingement measures in place are being used I cation or brushing (PROC10) or brushing Liquid ≤ 100 % I measures I gement measures in place are being used I measures I measures I measures I measures in place are being used I protection, hygiene and health evaluation by of (%):	≤ 56 °C	
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation of the conditions affindoor Maximum process teres. Control of work PROC10 Product (article) chase Physical form of product (article) chase Phy	to check that the risk mana- on conditions followed. fecting workers exposure mperature fer exposure: Roller application aracteristics fuct stance in product ontained in articles), frequentiations and to check that the risk mana- on conditions followed. asures related to personal application of the product of th	I measures not less than 3 to 5 air changes per hour). Ingement measures in place are being used I cation or brushing (PROC10) or brushing Liquid ≤ 100 % I measures I gement measures in place are being used I measures I measures I measures I measures in place are being used I protection, hygiene and health evaluation by of (%):	≤ 56 °C	
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process terms. 25. Control of work PROC10 Product (article) characteristical form of product (article) characteristical form of product (article) characteristical and organ Supervision in place to correctly and operation Conditions and measure a respirator product (article) characteristical form of product (article) characteristical and organ Supervision in place to correctly and operation Conditions and measure a respirator product (article) characteristical and organ Supervision in place to correctly and operation Conditions and measure a respirator product (article) characteristical and organ (article) characteristical and o	dard of general ventilation (reto check that the risk manal on conditions followed. fecting workers exposure mperature Refer exposure: Roller appliation aracteristics duct estance in product contained in articles), frequentiational conditions and to check that the risk manal on conditions followed. Sures related to personal exiting workers exposure related to manal conditions and the check that the risk manal on conditions followed.	I measures not less than 3 to 5 air changes per hour). Ingement measures in place are being used I cation or brushing (PROC10) or brushing Liquid ≤ 100 % I measures I gement measures in place are being used I measures I measures I measures I measures in place are being used I protection, hygiene and health evaluation by of (%):	≤ 56 °C 90 % (APF 10) ≤ 56 °C	
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process terms. 25. Control of work PROC10 Product (article) characteristic of prod Concentration of substandard and organ Supervision in place to correctly and operation Conditions and measure a respirator product conditions affindoor, and/or, outdoor Maximum process terms.	to check that the risk mana on conditions followed. fecting workers exposure mperature Roller application aracteristics luct stance in product ontained in articles), frequentiations and to check that the risk mana on conditions followed. asures related to persona oviding a minimum efficiency fecting workers exposure remperature ger exposure: Treatment of the check that the risk mana on conditions followed.	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % Idency and duration of use/exposure ≤ 8 h/day I measures Igement measures in place are being used Il protection, hygiene and health evaluation by of (%):	≤ 56 °C 90 % (APF 10) ≤ 56 °C	
Technical and organerovide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process terms. 2.25. Control of work PROC10 Product (article) chare Physical form of product (article) chare Concentration of substance duration Technical and organerovision in place to correctly and operation Conditions and measure a respirator product of the conditions affindoor, and/or, outdoor Maximum process terms. 2.26. Control of work PROC13	dard of general ventilation (rate check that the risk manal on conditions followed. fecting workers exposure mperature fer exposure: Roller application aracteristics duct stance in product contained in articles), frequentiational conditions and to check that the risk manal on conditions followed. Fecting workers exposure fecting workers exposure rate exposure: Treatment of articles and to check that the risk manal conditions followed.	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % Idency and duration of use/exposure ≤ 8 h/day I measures Igement measures in place are being used Il protection, hygiene and health evaluation by of (%):	≤ 56 °C 90 % (APF 10) ≤ 56 °C	
Provide a good stand Efficiency Supervision in place to correctly and operation Other conditions affindoor Maximum process terms. 25. Control of work PROC10 Product (article) chap Physical form of product (article) chap Concentration of substandard and organ Supervision in place to correctly and operation Conditions and measure a respirator product conditions affindoor, and/or, outdoor Maximum process terms. 26. Control of works.	dard of general ventilation (reto check that the risk manal on conditions followed. fecting workers exposure mperature fer exposure: Roller application aracteristics luct stance in product contained in articles), frequentiational conditions and to check that the risk manal on conditions followed. Teatment of articles aracteristics related to personal conditions followed. Treatment of articles aracteristics	I measures not less than 3 to 5 air changes per hour). Igement measures in place are being used Ication or brushing (PROC10) or brushing Liquid ≤ 100 % Idency and duration of use/exposure ≤ 8 h/day I measures Igement measures in place are being used Il protection, hygiene and health evaluation by of (%):	≤ 56 °C 90 % (APF 10) ≤ 56 °C	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained i	in articles), frequency an	d duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
Technical and organisationa	I conditions and measur	es	
		han 3 to 5 air changes per hour).	30 %
		measures in place are being used	
Other conditions affecting w	orkers exposure		
indoor			
Maximum process temperature	е		≤ 56 °C
.27. Control of worker expos	sure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characterist	tics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
Amount used (or contained i	in articles), frequency an	d duration of use/exposure	
Exposure duration	,,	≤ 8 h/day	
Technical and organisationa	I conditions and measur	es	
		measures in place are being used	
correctly and operation condition		g acca	
Conditions and measures re	lated to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a r	minimum efficiency of (%):		90 %
0.1			(APF 10)
Other conditions affecting w indoor,and/or,outdoor	orkers exposure		
	•		≤ 56 °C
Maximum process temperature		s by dipping and pouring (PROC13)	
	Treatment of articles by di		
		pping and poaring	
Product (article) characterist Physical form of product	tics	Liquid	
Concentration of substance in	product	Liquid ≤ 100 %	
	•		
Amount used (or contained i	in articles), frequency an		
Exposure duration		≤ 8 h/day	
Technical and organisationa			
		han 1 to 3 air changes per hour)	
	that the risk management r	measures in place are being used	90 %
correctly and operation condition Other conditions affecting w			
indoor	ornera exposure		
Maximum process temperature	Δ		≤ 56 °C
•		s by dipping and pouring (PROC13)	
•	Treatment of articles by di		
		Fring and Francis	
Product (article) characterist Physical form of product	1103	Liquid	
Concentration of substance in	product	≤ 100 %	
	•		
Amount used (or contained in Exposure duration	in articles), frequency an	· · · · · · · · · · · · · · · · · · ·	
EXMEDITE CHICATION		≤ 8 h/day	
•	I conditions and measur	es	
Technical and organisationa Supervision in place to check t	that the risk management r	measures in place are being used	
Technical and organisationa Supervision in place to check t correctly and operation condition	that the risk management rons followed.	measures in place are being used	
Technical and organisationa Supervision in place to check t	that the risk management rons followed.	measures in place are being used	

08/08/2022 (Revision date) IE - en 69/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

.2.30. Control of worker expo	sure: Equipment cleaning	and maintenance (PROC8a, PROC28	
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		
PROC28	Manual maintenance (cleaning and repair) of machinery		
Product (article) characteris	stics		
Physical form of product	51100	Liquid	
Concentration of substance in product		≤ 100 %	
	•		
Amount used (or contained	in articles), frequency an	·	
Exposure duration		≤ 8 h/day	
Technical and organisation Supervision in place to check correctly and operation condi	that the risk management r	es measures in place are being used	
Conditions and measures r	elated to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a	minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperatu	re		≤ 56 °C
.2.31. Control of worker expo	sure: Equipment cleaning	and maintenance (PROC8a, PROC28	
PROC8a		nixture (charging and discharging) at nor	n-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Amount used (or contained in articles), frequency and Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measure	es	
Efficiency	that the risk management r	han 3 to 5 air changes per hour). measures in place are being used	30 %
Other conditions affecting			
indoor	Workers exposure		
Maximum process temperatu	re		≤ 56 °C
		and maintenance (PROC8a, PROC28	
PROC8a		nixture (charging and discharging) at nor	•
PROC28		ining and repair) of machinery	
Product (article) characteris			
Physical form of product	51105	Liquid	
Concentration of substance in	product	≤ 100 %	
	•		
Amount used (or contained	in articles), frequency an		
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measure	es	
Supervision in place to check correctly and operation condi	· ·	measures in place are being used	
Other conditions affecting	workers exposure		
outdoor			
Maximum process temperatu	re		≤ 56 °C
	sure: Equipment cleaning	and maintenance (PROC8a, PROC28	
PROC8a		nixture (charging and discharging) at nor	n-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	

08/08/2022 (Revision date) IE - en 70/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Exposure duration	≤ 8 h/day	
Technical and organisational condit	ions and measures	
Provide a good standard of general ve	ntilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency o	f at least	90 %
Supervision in place to check that the correctly and operation conditions follows:	risk management measures in place are being used wed.	
Other conditions affecting workers	exposure	
indoor		
Maximum process temperature		≤ 56 °C

6.3. Exposure estimation and reference to its source

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	50 %	ERC
Release to waste water from process	750 kg/day	ERC
Release fraction to air from process	50 %	ERC
Release to air from process	750 kg/day	ERC
Release fraction to soil from process	1 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	5.418	10.6	0.511	EUSES v2.1.2
Marine water	mg/l	0.537	1.06	0.507	EUSES v2.1.2
Freshwater sediment	mg/kg	23.76	30.4	0.782	EUSES v2.1.2
Marine water sediment	mg/kg	2.354	3.04	0.774	EUSES v2.1.2
Sewage treatment plant	mg/l	46.7	100	0.467	EUSES v2.1.2
Soil	mg/kg	0.707	29.5	0.024	EUSES v2.1.2

6.3.2. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

6.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker

6.3.4. Worker exposure Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 71/265

5. Worker exposure Chemical production where opportunity for exposure arises (PROC4)				
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.237		
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker	
3.6. Worker exposure Mixing op	erations (open systems) (PROC5)			
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.124	ECETOC TRA worker	
	perations (open systems) (PROC5)	0.1	ECETOC TRA WOIKEI	
·		RCR	Mathad	
Route of exposure and type of effects	Exposure estimate		Method	
Dermal - Long-term - systemic effects Inhalation - Long-term -	13.71 mg/kg bw/day 423.5 mg/m³	0.074	ECETOC TRA worker ECETOC TRA worker	
systemic effects Sum RCR - Long-term -	425.5 mg/m²	0.424	ECETOC TRA WORKEI	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker	
3.8. Worker exposure Mixing op	erations (open systems) (PROC5)			
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.057		
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker	
· · · · · · · · · · · · · · · · · · ·	erations (open systems) (PROC5)			
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker	
	ring (including Banburys) (PROC6)	0.030	LOETOC TRA WOIKEI	
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker	
Inhalation - Long-term -	60.5 mg/m ³	0.05	ECETOC TRA worker	
systemic effects				
systemic effects Sum RCR - Long-term - systemic effects		0.197		
Sum RCR - Long-term - systemic effects	242 mg/m³	0.197	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ ring (including Banburys) (PROC6)		ECETOC TRA worker	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation			ECETOC TRA worker Method	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.11. Worker exposure Calender Route of exposure and type	ring (including Banburys) (PROC6)	0.1		

Sum RCR - Long-term -		0.497	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ring (including Banburys) (PROC6)	0.090	ECETOC TRA WOIREI
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
6.3.13. Worker exposure Calender	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.743 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.065	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
6.3.14. Worker exposure Industria	· · · · · · · · · · · · · · · · · · ·		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	8.572 mg/kg bw/day	0.046	ECETOC TRA worker
Inhalation - Long-term - systemic effects	1000 mg/m ³	0.826	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects		0.872	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
6.3.15. Worker exposure Industria	l spraying (PROC7)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
	Exposure estimate 2.143 mg/kg bw/day	RCR 0.012	Method ECETOC TRA worker
of effects Dermal - Long-term - systemic			
of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	2.143 mg/kg bw/day	0.012	ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³	0.012 0.005 0.017	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a)
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³	0.012 0.005 0.017	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a)
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging at Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging at Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging at Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ of substance or mixture (charging at substance or mixture	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ of substance or mixture (charging a Exposure estimate	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Acilities (PROC8a) Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging at Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ of substance or mixture (charging at Exposure estimate Exposure estimate 13.71 mg/kg bw/day	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Acilities (PROC8a) Method ECETOC TRA worker Acilities (PROC8a) Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ of substance or mixture (charging a Exposure estimate	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Acilities (PROC8a) Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects United Systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR 0.074 0.05 0.124	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR 0.074 0.05 0.124 0.1	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.18. Worker exposure Transfer	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate)	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR 0.074 0.05 0.124 0.1 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker acilities (PROC8a) ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR 0.074 0.05 0.124 0.1 and discharging) at non-dedicated f RCR	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker acilities (PROC8a) Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.17. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.18. Worker exposure Transfer Route of exposure and type	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ of substance or mixture (charging a Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ of substance or mixture (charging a Exposure estimate)	0.012 0.005 0.017 0.1 and discharging) at non-dedicated f RCR 0.074 0.35 0.424 0.698 and discharging) at non-dedicated f RCR 0.074 0.05 0.124 0.1 and discharging) at non-dedicated f	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker ECETOC TRA worker acilities (PROC8a) ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term -			
systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.3.19. Worker exposure Transfer	of substance or mixture (charging	and discharging) at non-dedicated	facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
		and discharging) at dedicated facili	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	363 mg/m³	0.3	ECETOC TRA worker
systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·		containers (dedicated filling line, in	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
5.3.22. Worker exposure Roller ap	oplication or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Route of exposure and type of effects Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	·	0.147	
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m ³	0.147 0.05 0.197	ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³	0.147	ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³	0.147 0.05 0.197	ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.23. Worker exposure Roller and Route of exposure and type	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10)	0.147 0.05 0.197	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.23. Worker exposure Roller at Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate	0.147 0.05 0.197 0.1	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.2.23. Worker exposure Roller at Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.2.23. Worker exposure Roller at Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³	0.147 0.05 0.197 0.1 RCR 0.147 0.35	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.23. Worker exposure Roller at Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.24. Worker exposure Roller at Roller at Route - Local - Inhalation	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ polication or brushing (PROC10)	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497 0.698	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.2.23. Worker exposure Roller at Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.23. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.24. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497 0.698 RCR	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.2.3. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.2.4. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ polication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ polication or brushing (PROC10) Exposure estimate	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497 0.698 RCR 0.147	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.23. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.24. Worker exposure Roller and Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	27.43 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day 423.5 mg/m³ pplication or brushing (PROC10) Exposure estimate 27.43 mg/kg bw/day	0.147 0.05 0.197 0.1 RCR 0.147 0.35 0.497 0.698 RCR	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

74/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

3.25. Worker exposure Roller ap	pplication or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
3.26. Worker exposure Treatme	nt of articles by dipping and pouring	g (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000	0.424	F0FT00 TD4
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
·	nt of articles by dipping and pouring	· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	240 m g/m3	0.124	FOFTOC TDA worker
	242 mg/m ³ nt of articles by dipping and pouring	0.1 (PPOC13)	ECETOC TRA worker
•		RCR	Method
Route of exposure and type of effects	Exposure estimate		
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.057	ECETOC TRA worker
	nt of articles by dipping and pouring		ECETOC TRA Worker
· ·		· · · · · · · · · · · · · · · · · · ·	Method
Route of exposure and type of effects	Exposure estimate	RCR	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000/2	0.424	FOFTOO TDA
Acute - Local - Inhalation	1690 mg/m³ ent cleaning and maintenance (PRO	0.698	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
3.31. Worker exposure Equipme	ent cleaning and maintenance (PRO	C8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Dermal - Long-term - systemic effects	15.71 mg/kg bw/day		

08/08/2022 (Revision date) IE - en 75/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.32. Worker exposure Equipme	ent cleaning and maintenanc	e (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.33. Worker exposure Equipme	ent cleaning and maintenanc	e (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
. Guidance to Downstre	am User to evaluate wh	nether he works inside t	he boundaries set by the ES
.1. Environment			
Guidance - Environment			which may not be applicable to all sites; thus, pecific risk management measures
.2. Health			
Guidance - Health	No additional risk mana		se that are mentioned above, are needed to

08/08/2022 (Revision date) IE - en 76/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

7. AC SE07: Use in rubber production and processing

llea in rubbar nr	oduction and processing ES Re	f.: AC SE07 Association ref code:
ose ili rubbei þi	ouuciion anu brocessinu	/pe: Worker
Environment		
CS 1	Use in rubber production and processing	ERC6d
Worker	Coo in rubber production and processing	ENOOU
CS 2	Use in closed process; Storage	PROC1
CS 3	Chemical production or refinery in closed continuous	PROC2
C3 3	process with occasional controlled exposure or processe with equivalent containment conditions	
CS 4	Use in closed batch process (synthesis or formulation); With occasional controlled exposure	PROC3
CS 5	Chemical production where opportunity for exposure arises	PROC4
CS 6	Mixing operations (open systems)	PROC5
CS 7	Mixing operations (open systems)	PROC5
CS 8	Mixing operations (open systems)	PROC5
CS 9	Mixing operations (open systems)	PROC5
CS 10	Calendering (including Banburys)	PROC6
CS 11	Calendering (including Banburys)	PROC6
CS 12	Calendering (including Banburys)	PROC6
CS 13	Calendering (including Banburys)	PROC6
CS 14	Industrial spraying	PROC7
CS 15	Industrial spraying	PROC7
CS 16	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 17	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 18	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 19	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 20	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 21	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	PROC9
CS 22	Roller application or brushing	PROC10
CS 23	Roller application or brushing	PROC10
CS 24	Roller application or brushing	PROC10
CS 25	Roller application or brushing	PROC10
CS 26	Treatment of articles by dipping and pouring	PROC13
CS 27	Treatment of articles by dipping and pouring	PROC13
CS 28	Treatment of articles by dipping and pouring	PROC13
CS 29	Treatment of articles by dipping and pouring	PROC13
CS 30	Tabletting, compression, extrusion, pelettisation, granulation	PROC14
CS 31	Tabletting, compression, extrusion, pelettisation, granulation	PROC14
CS 32	Tabletting, compression, extrusion, pelettisation, granulation	PROC14
CS 33	Tabletting, compression, extrusion, pelettisation, granulation	PROC14
CS 34	Equipment cleaning and maintenance	PROC8a, PROC28
CS 35	Equipment cleaning and maintenance	PROC8a, PROC28
CS 36	Equipment cleaning and maintenance	PROC8a, PROC28
CS 37	Equipment cleaning and maintenance	PROC8a, PROC28

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent 7.2. Conditions of use affecting exposure 7.2.1. Control of environmental exposure: Use in rubber production and processing (ERC6d) ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article) Amount used, frequency and duration of use (or from service life) Daily amount per site Annual site tonnage (tons/year): ≤ 27000 t/yr Conditions and measures related to sewage treatment plant Assumed domestic sewage treatment plant flow ≥ 2000 m³/d Controlled application to agricultural soil Sludge treatment technique: Conditions and measures related to treatment of waste (including article waste) Dispose of waste in accordance with environmental 7.2.2. Control of worker exposure: Use in closed process; Storage (PROC1) PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/dav Technical and organisational conditions and measures Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor,and/or,Outdoor ≤ 56 °C Maximum process temperature 7.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2 PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Technical and organisational conditions and measures Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed Other conditions affecting workers exposure indoor, and/or, Outdoor ≤ 56 °C Maximum process temperature 7.2.4. Control of worker exposure: Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3) PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Product (article) characteristics Physical form of product Liquid ≤ 100 % Concentration of substance in product Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures

08/08/2022 (Revision date) IE - en 78/265

Use in closed batch process (synthesis or formulation). With occasional controlled exposure

Supervision in place to check that the risk manageme correctly and operation conditions followed.	ent measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 56 °C
2.5. Control of worker exposure: Chemical produc	tion where opportunity for exposure ar	ises (PROC4)
PROC4 Chemical production w	here opportunity for exposure arises	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	· ≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and mea	,	
Supervision in place to check that the risk management		
correctly and operation conditions followed.	the measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
2.6. Control of worker exposure: Mixing operations	s (open systems) (PROC5)	
PROC5 Mixing or blending in b	eatch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and mea	euroe	
Supervision in place to check that the risk management		
correctly and operation conditions followed.	a	
Conditions and measures related to personal pro	tection, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of ((%):	90 %
0.0		(APF 10)
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		∠ FG °C
Maximum process temperature	(anon systems) (DDOCE)	≤ 56 °C
2.7. Control of worker exposure: Mixing operations PROC5 Mixing or blending in b		
, o	atch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	· · · · · · · · · · · · · · · · · · ·	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and mea	sures	
	ess than 3 to 5 air changes per hour).	30 %
Provide a good standard of general ventilation (not le		
Efficiency Supervision in place to check that the risk manageme	ent measures in place are being used	
Efficiency Supervision in place to check that the risk manageme correctly and operation conditions followed.	ent measures in place are being used	
Efficiency Supervision in place to check that the risk manageme	ent measures in place are being used	
Efficiency Supervision in place to check that the risk manageme correctly and operation conditions followed. Other conditions affecting workers exposure	ent measures in place are being used	≤ 56 °C
Efficiency Supervision in place to check that the risk manageme correctly and operation conditions followed. Other conditions affecting workers exposure indoor	· · ·	≤ 56 °C
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	s (open systems) (PROC5)	≤ 56 °C
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations PROC5 Mixing or blending in b	s (open systems) (PROC5)	≤ 56 °C
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations PROC5 Mixing or blending in b	s (open systems) (PROC5) ratch processes	≤ 56 °C
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 2.8. Control of worker exposure: Mixing operations PROC5 Mixing or blending in b	s (open systems) (PROC5)	≤ 56 °C

	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measu	res	
	·	than 1 to 3 air changes per hour)	
Local exhaust ventilation - ef Supervision in place to check correctly and operation cond	k that the risk management	measures in place are being used	90 %
Other conditions affecting			'
indoor	•		
Maximum process temperatu	ıre		≤ 56 °C
2.9. Control of worker expos	sure: Mixing operations (c	ppen systems) (PROC5)	
PROC5	Mixing or blending in batc	h processes	
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	•	
<u> </u>		measures in place are being used	
correctly and operation cond		modeling in place are being acco	
Other conditions affecting	workers exposure		
outdoor			
Maximum process temperatu	ıre		≤ 320 °C
2.10. Control of worker expo	osure: Calendering (includ	ding Banburys) (PROC6)	
PROC6	Calendering operations		
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	aal conditions and moasu	,	
<u> </u>	k that the risk management	measures in place are being used	
Conditions and measures	related to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing a	a minimum efficiency of (%):	:	90 % (APF 10)
Other conditions affecting	workers exposure		
Indoor,and/or,outdoor			
Maximum process temperatu	ıre		≤ 56 °C
2.11. Control of worker expo	~	ding Banburys) (PROC6)	
PROC6	Calendering operations		
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation			
Efficiency	,	than 3 to 5 air changes per hour).	30 %
correctly and operation cond		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ıre		≤ 56 °C

.2.12. Control of worker exposure: Calendering (include	ding Banburys) (PROC6)	
PROC6 Calendering operations		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measu	res	
Supervision in place to check that the risk management correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.13. Control of worker exposure: Calendering (include	ding Banburys) (PROC6)	2 320 0
PROC6 Calendering operations	unig Banburys) (FROCO)	
5 1		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency are	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measu	res	
Provide a good standard of general ventilation (not less	than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		90 %
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
2.14. Control of worker exposure: Industrial spraying	(PROC7)	
PROC7 Industrial spraying		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency as	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minute)		
Technical and organisational conditions and measu		
Provide a good standard of general ventilation (not less		
Local exhaust ventilation - efficiency of at least	than 1 to 3 an changes per hour)	95 %
Surface spraying of liquids. Spraying with no or low com	pressed air use	95 76
Ensure that direction of application is only horizontal or of	•	
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
Indoors, Assumes large workrooms		
Maximum process temperature		≤ 56 °C
2.15. Control of worker exposure: Industrial spraying	(PROC7)	
PROC7 Industrial spraying		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
·		
Amount used (or contained in articles), frequency as	· ·	
Exposure duration	≤ 8 h/day	
osure duration 022 (Revision date)	≤ 8 h/day	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Moderate application rate (0			
moderate application rate (e	.3 - 3 l/minute)		
Technical and organisatio	nal conditions and measur	res	
Surface spraying of liquids.	Spraying with no or low com	pressed air use	
Ensure that direction of appl	ication is only horizontal or o	downward.	
Supervision in place to chec correctly and operation cond		measures in place are being used	
Conditions and measures	related to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%):		90 %
Wear gloves providing a mir	nimum efficiency of (%):		(APF 10) 80 % (EN 374)
Other conditions affecting	workers exposure		(EN 374)
Indoors, Assumes large work	rooms,and/or,Outdoors,clos	se to buildings (< 4 m)	
Maximum process temperat	ure		≤ 56 °C
2.16. Control of worker exp	osure: Transfer of substar	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or r	nixture (charging and discharging) at n	on-dedicated facilities
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
•	nol conditions or I was	,	
Technical and organisatio			20.0/
Efficiency Supervision in place to chec	k that the risk management	than 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation cond	ditions followed.		
Other conditions affecting	workers exposure		
indoor			
Maximum process temperat	ure		
			≤ 56 °C
<u> </u>	osure: Transfer of substar	· · · · · · · · · · · · · · · · · · ·	rging) at non-dedicated facilities (PROC8a)
PROC8a	osure: Transfer of substar Transfer of substance or r	nce or mixture (charging and dischar nixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character	osure: Transfer of substar Transfer of substance or r	nixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product	osure: Transfer of substar Transfer of substance or r istics	nixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character	osure: Transfer of substar Transfer of substance or r istics	nixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance	osure: Transfer of substar Transfer of substance or r istics in product	nixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe	osure: Transfer of substar Transfer of substance or r istics in product	nixture (charging and discharging) at n Liquid ≤ 100 %	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	osure: Transfer of substar Transfer of substance or r istics in product d in articles), frequency ar	hixture (charging and discharging) at n Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	Transfer of substance or r istics in product d in articles), frequency ar	hixture (charging and discharging) at n Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to checcorrectly and operation concentrates	Transfer of substance or ristics in product d in articles), frequency ar mal conditions and measur general ventilation (not less k that the risk management ditions followed.	mixture (charging and discharging) at n Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checcorrectly and operation cond Other conditions affecting	Transfer of substance or ristics in product d in articles), frequency ar mal conditions and measur general ventilation (not less k that the risk management ditions followed.	Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res than 3 to 5 air changes per hour).	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to chec correctly and operation concoditions affecting indoor	Transfer of substance or ristics in product d in articles), frequency ar nal conditions and measur general ventilation (not less k that the risk management ditions followed. workers exposure	Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res than 3 to 5 air changes per hour).	on-dedicated facilities (PROC8a) 30 %
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to chec correctly and operation concontent of the conditions affecting indoor Maximum process temperat	Transfer of substance or ristics in product d in articles), frequency ar nal conditions and measur general ventilation (not less k that the risk management ditions followed. workers exposure	Liquid ≤ 100 % Indicate the discharging of the discharge of the discharging of the discharge of t	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to chec correctly and operation concentry of the conditions affecting indoor Maximum process temperat 2.18. Control of worker exp	Transfer of substance or ristics in product d in articles), frequency ar mal conditions and measur general ventilation (not less k that the risk management ditions followed. workers exposure ure osure: Transfer of substar	Liquid ≤ 100 % Indicate the description of the d	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to chec correctly and operation concontent of the conditions affecting indoor Maximum process temperat	Transfer of substance or ristics in product d in articles), frequency ar mal conditions and measur general ventilation (not less k that the risk management ditions followed. workers exposure ure osure: Transfer of substar	Liquid ≤ 100 % Indicate the discharging of the discharge of the discharging of the discharge of t	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to chec correctly and operation concontent of the conditions affecting indoor Maximum process temperate 1.18. Control of worker exp	Transfer of substance or ristics in product d in articles), frequency are nal conditions and measure general ventilation (not less lik that the risk management ditions followed. workers exposure osure: Transfer of substance or resistance	Liquid ≤ 100 % Indicate the description of the d	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checorrectly and operation conc Other conditions affecting indoor Maximum process temperat 18. Control of worker exp PROC8a Product (article) character	Transfer of substance or ristics in product d in articles), frequency are nal conditions and measure general ventilation (not less lik that the risk management ditions followed. workers exposure osure: Transfer of substance or resistance	Liquid ≤ 100 % Indicate the description of the d	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to chec correctly and operation concentry of the conditions affecting indoor Maximum process temperat 2.18. Control of worker exp	Transfer of substance or ristics in product d in articles), frequency are real conditions and measure general ventilation (not less k that the risk management ditions followed. workers exposure ure osure: Transfer of substance or ristics	Liquid 100 % 100 d duration of use/exposure 100 s h/day 100 s h/da	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checcorrectly and operation concorted of the conditions affecting indoor Maximum process temperat 1.18. Control of worker exp PROC8a Product (article) character Physical form of product Concentration of substance	Transfer of substance or ristics in product d in articles), frequency are real conditions and measure general ventilation (not less less that the risk management ditions followed. workers exposure ure osure: Transfer of substance or ristics in product	Liquid ≤ 100 % Indicate the description of the d	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checcorrectly and operation concorted of the conditions affecting indoor Maximum process temperat 1.18. Control of worker exp PROC8a Product (article) character Physical form of product Concentration of substance	Transfer of substance or ristics in product d in articles), frequency are real conditions and measure general ventilation (not less less that the risk management ditions followed. workers exposure ure osure: Transfer of substance or ristics in product	Liquid ≤ 100 % Indicate the description of the d	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checorrectly and operation concommoditions affecting indoor Maximum process temperate 1.18. Control of worker experior experior (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	Transfer of substance or ristics in product d in articles), frequency are real conditions and measure general ventilation (not less lik that the risk management ditions followed. workers exposure ure osure: Transfer of substance or ristics in product d in articles), frequency are	Liquid ≤ 100 % Indicate the discharging and discharging at no series It is a series than 3 to 5 air changes per hour). Indicate or mixture (charging and discharging) at no series than 3 to 5 air changes per hour). Indicate or mixture (charging and discharging) at no series than a discharging and discharging) at no series that the discharging and discharging and discharging and discharging and discharging are series to series the discharging are series to series the discharging and discharging are series to series the series that	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)
PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of efficiency Supervision in place to checorrectly and operation concount of the conditions affecting indoor Maximum process temperated. 18. Control of worker experior (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	Transfer of substance or ristics in product d in articles), frequency are real conditions and measure general ventilation (not less like that the risk management dittions followed. workers exposure ure osure: Transfer of substance or ristics in product d in articles), frequency are real conditions and measure real conditions are real conditions and real conditions are real conditions are real conditions and real conditions are real conditions are real conditions are real conditions are r	Liquid ≤ 100 % Indicate the discharging and discharging at no series It is a series than 3 to 5 air changes per hour). Indicate or mixture (charging and discharging) at no series than 3 to 5 air changes per hour). Indicate or mixture (charging and discharging) at no series than a discharging and discharging) at no series that the discharging and discharging and discharging and discharging and discharging and discharging and discharging at no series that the discharging are series that the discharge are series that the disc	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 % ≤ 56 °C rging) at non-dedicated facilities (PROC8a)

08/08/2022 (Revision date) IE - en 82/265

vvear a respirator providing	a minimum efficiency of (%):	tion, hygiene and health evaluation	90 %
041			(APF 10)
Other conditions affecting	g workers exposure		
indoor,and/or,Outdoor Maximum process temperat	turo		≤ 320 °C
		ace or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at r	
		mixture (oranging and disentinging) at t	
Product (article) character Physical form of product	ristics	Liquid	
Concentration of substance	in product	≤ 100 %	
	•		
· ·	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measur	es	
	` `	than 1 to 3 air changes per hour)	
Local exhaust ventilation - e Supervision in place to chec correctly and operation con-	ck that the risk management i	measures in place are being used	90 %
Other conditions affecting			
indoor	J OMPOONIO		
Maximum process temperat	ture		≤ 56 °C
		nce or mixture (charging and discha	rging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or n	nixture (charging and discharging) at c	ledicated facilities
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles) frequency an	nd duration of use/exposure	
·	ed in articles), frequency an	ad duration of use/exposure ≤ 8 h/day	
Exposure duration		≤ 8 h/day	
Exposure duration Technical and organisatio Supervision in place to chec	onal conditions and measur	≤ 8 h/day	
Exposure duration Technical and organisatio Supervision in place to checorrectly and operation con-	onal conditions and measur ck that the risk management of ditions followed.	≤ 8 h/day	
Exposure duration Technical and organisatio Supervision in place to chec	onal conditions and measur ck that the risk management of ditions followed.	≤ 8 h/day	
Exposure duration Technical and organisation Supervision in place to cheod correctly and operation conduction Other conditions affecting	onal conditions and measur ck that the risk management of ditions followed. g workers exposure	≤ 8 h/day	≤ 56 °C
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperation	onal conditions and measur ck that the risk management of ditions followed. g workers exposure ture	≤ 8 h/day res measures in place are being used	≤ 56 °C (dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperation.21. Control of worker expressions.	onal conditions and measur ck that the risk management of ditions followed. g workers exposure ture posure: Transfer of substan	≤ 8 h/day res measures in place are being used	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated	onal conditions and measure that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or p	≤ 8 h/day res measures in place are being used nce or mixture into small containers	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperates	onal conditions and measure that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or p	es measures in place are being used measures in place are being used more or mixture into small containers preparation into small containers (dedicated)	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated	onal conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics	≤ 8 h/day res measures in place are being used nce or mixture into small containers	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting and organisation conditions affecting and organization conditions affecting and aximum process temperated. 21. Control of worker expansions. PROC9 Product (article) character physical form of product Concentration of substance	onal conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics ein product	res measures in place are being used oce or mixture into small containers preparation into small containers (dediction of the containers) Liquid ≤ 100 %	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperation.21. Control of worker expressions PROC9 Product (article) character Physical form of product Concentration of substance Amount used (or contained)	onal conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics ein product	res measures in place are being used ace or mixture into small containers are paration into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated	conal conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics e in product ed in articles), frequency and	res measures in place are being used ice or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % id duration of use/exposure ≤ 8 h/day	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management is	res measures in place are being used ice or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % id duration of use/exposure ≤ 8 h/day	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 21. Control of worker exposure (article) character in product in place to checorrectly and operation conditions.	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or pristics e in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed.	res measures in place are being used ince or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperate (21. Control of worker expressors) PROC9 Product (article) character Physical form of product Concentration of substance Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting of the conditions affecting of the conditions affecting or conditions affect	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or pristics e in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed.	res measures in place are being used ince or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperate (21. Control of worker expressors) PROC9 Product (article) character (21. Concentration of substance (21. Concentr	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure	res measures in place are being used ince or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res	(dedicated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 21. Control of worker expoces PROC9 Product (article) characted physical form of product Concentration of substance Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated.	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure	res measures in place are being used ace or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used	(dedicated filling line, including weighing) cated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 21. Control of worker exposure duration of product (article) character Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation of Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 22. Control of worker exposure duration or worker exposure duration.	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure ture	res measures in place are being used ace or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used ar brushing (PROC10)	(dedicated filling line, including weighing) cated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperate (21. Control of worker expressors) PROC9 Product (article) character (22. Control of substance (23. Control of substance (24. Concentration of substance (25. Concentration of substance (25. Concentration of substance (25. Concentration of substance (25. Control of substance (26. Concentration of substance	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Roller application or Brush	res measures in place are being used ace or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used ar brushing (PROC10)	(dedicated filling line, including weighing) cated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substant Transfer of substance or pristics in product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Roller application or Brush	res measures in place are being used ace or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used ar brushing (PROC10)	(dedicated filling line, including weighing) cated filling line, including weighing)
Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 21. Control of worker exposure PROC9 Product (article) character Physical form of product Concentration of substance Exposure duration Technical and organisation Supervision in place to checorrectly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 22. Control of worker exposured. PROC10 Product (article) character PROC10	ck that the risk management of ditions followed. g workers exposure ture cosure: Transfer of substance or pristics ein product ed in articles), frequency and conditions and measure ck that the risk management of ditions followed. g workers exposure ture cosure: Roller application or Roller application or brush ristics	res measures in place are being used ince or mixture into small containers preparation into small containers (dedict Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res measures in place are being used or brushing (PROC10) ming	(dedicated filling line, including weighing) cated filling line, including weighing)

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and meas	ures	
Supervision in place to check that the risk managemer correctly and operation conditions followed.	nt measures in place are being used	
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.23. Control of worker exposure: Roller application	or brushing (PROC10)	
PROC10 Roller application or brus	shing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and meas	ures	
Provide a good standard of general ventilation (not less		30 %
Efficiency		
Supervision in place to check that the risk management correctly and operation conditions followed.	nt measures in place are being used	
Other conditions affecting workers exposure		
Indoor		
Maximum process temperature		≤ 56 °C
2.24. Control of worker exposure: Roller application	or brushing (PROC10)	
PROC10 Roller application or brus	shing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency a	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and meas	ures	
Supervision in place to check that the risk managemer correctly and operation conditions followed.	nt measures in place are being used	
Conditions and measures related to personal prote	ection, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%	6):	90 % (APF 10)
Other conditions affecting workers exposure		
Indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
2.25. Control of worker exposure: Roller application	or brushing (PROC10)	
PROC10 Roller application or brus	shing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and meas	,	
Provide a good standard of general ventilation (not less		
Local exhaust ventilation - efficiency of at least	c ala I to o all originges per flour)	90 %
Supervision in place to check that the risk managemer correctly and operation conditions followed.	nt measures in place are being used	
Other conditions affecting workers exposure		
indoor		

08/08/2022 (Revision date) IE - en 84/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

.26. Control of worker ex	posure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	· ≤ 100 %	
	ed in articles), frequency an	d duration of use/exposure	
Exposure duration	ica in artiology, irequestoy ari	≤ 8 h/day	
·	onal conditions and measur	,	
		han 3 to 5 air changes per hour).	30 %
Efficiency	· .		00 /0
Supervision in place to che correctly and operation con		measures in place are being used	
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera	ature		≤ 56 °C
.27. Control of worker ex	posure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency an	d duration of use/exposure	
Exposure duration	, , ,	≤ 8 h/day	
•	onal conditions and measur	AS	
<u>~</u>		measures in place are being used	
correctly and operation con		g docu	
Conditions and measures	s related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing	g a minimum efficiency of (%):		90 %
			(APF 10)
	_		()
Other conditions affecting	g workers exposure		(
indoor,and/or,outdoor	•		
indoor,and/or,outdoor Maximum process tempera	ature	a had line in a made a surious (DDOCA1)	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex	ature posure: Treatment of article	s by dipping and pouring (PROC13)	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13	ature posure: Treatment of article Treatment of articles by di		
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte	ature posure: Treatment of article Treatment of articles by di	pping and pouring	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product	ature posure: Treatment of article Treatment of articles by dieristics	pping and pouring Liquid	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte	ature posure: Treatment of article Treatment of articles by dieristics	pping and pouring	
indoor,and/or,outdoor Maximum process tempera .28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance	ature posure: Treatment of article Treatment of articles by dieristics	pping and pouring Liquid ≤ 100 %	
indoor,and/or,outdoor Maximum process tempera .28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance	ature posure: Treatment of article Treatment of articles by diseristics e in product	pping and pouring Liquid ≤ 100 %	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration	ature posure: Treatment of article Treatment of articles by diseristics e in product	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
indoor,and/or,outdoor Maximum process tempera .28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation	ature posure: Treatment of article Treatment of articles by diseristics e in product and in articles), frequency and conditions and measure eck that the risk management in	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatio Supervision in place to che	ature posure: Treatment of article Treatment of articles by diseristics e in product med in articles), frequency and conal conditions and measure eck that the risk management inditions followed.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatio Supervision in place to che correctly and operation cor	ature posure: Treatment of article Treatment of articles by diseristics e in product med in articles), frequency and conal conditions and measure eck that the risk management inditions followed.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
indoor,and/or,outdoor Maximum process tempera .28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affectine	ature posure: Treatment of article Treatment of articles by diseristics e in product red in articles), frequency and conal conditions and measure eck that the risk management inditions followed. reg workers exposure	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatio Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure ack that the risk management in articles in articles in articles in a management in a	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatio Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure ack that the risk management in articles in articles in articles in a management in a	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13)	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatio Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera29. Control of worker ex	reatment of article Treatment of articles by dispristics e in product red in articles), frequency and reck that the risk management in articles followed. reg workers exposure ature posure: Treatment of articles by dispressions.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13)	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera 29. Control of worker ex PROC13	reatment of article Treatment of articles by dispristics e in product red in articles), frequency and reck that the risk management in articles followed. reg workers exposure ature posure: Treatment of articles by dispressions.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13)	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera 29. Control of worker ex PROC13 Product (article) characte	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure ack that the risk management in ditions followed. man workers exposure ature posure: Treatment of article Treatment of articles by dispristics	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13) pping and pouring	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera 29. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure eck that the risk management is inditions followed. In gworkers exposure ature posure: Treatment of article Treatment of articles by dispristics e in product	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13) pping and pouring Liquid ≤ 100 %	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisatic Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera 29. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure ack that the risk management in ditions followed. man workers exposure ature posure: Treatment of article Treatment of articles by dispristics	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13) pping and pouring Liquid ≤ 100 % d duration of use/exposure	≤ 56 °C
indoor,and/or,outdoor Maximum process tempera 28. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation Supervision in place to che correctly and operation cor Other conditions affecting outdoor Maximum process tempera 29. Control of worker ex PROC13 Product (article) characte Physical form of product Concentration of substance Amount used (or contain Exposure duration	ature posure: Treatment of article Treatment of articles by dispristics e in product med in articles), frequency and conal conditions and measure eck that the risk management is inditions followed. In gworkers exposure ature posure: Treatment of article Treatment of articles by dispristics e in product	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used s by dipping and pouring (PROC13) pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 56 °C

08/08/2022 (Revision date) IE - en 85/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Local exhaust ventilation - eff	,		90 %
Supervision in place to check correctly and operation condit		measures in place are being used	
Other conditions affecting v	workers exposure		
indoor			
Maximum process temperatur	re		≤ 40 °C
2.30. Control of worker expo	sure: Tabletting, compres	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measur	es	
		han 3 to 5 air changes per hour).	30 %
	that the risk management ritions followed.	measures in place are being used	
Other conditions affecting v	workers exposure		
indoor			
Maximum process temperatur	re		≤ 56 °C
2.31. Control of worker expo	sure: Tabletting, compres	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measur	es	
	that the risk management r	measures in place are being used	
Conditions and measures re	elated to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a	minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting v	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperatur	re		≤ 320 °C
2.32. Control of worker expo	sure: Tabletting, compres	ssion, extrusion, pelettisation, grant	ulation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Exposure duration	,,,,	≤ 8 h/day	
Technical and organisation	al conditions and measur	es	
Provide a good standard of ge Efficiency	eneral ventilation (not less t	han 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation condit		,	
Other conditions affecting v	workers exposure		
indoor			. 50.00
indoor Maximum process temperatu	re		≤ 56 °C

08/08/2022 (Revision date) IE - en 86/265

Product (article) characte	ristics					
Physical form of product		Liquid				
Concentration of substance	in product	≤ 100 %				
Amount used (or containe	ed in articles), frequency an	duration of use/exposure				
Exposure duration	,, ,	≤ 8 h/day				
Technical and organisatio	nal conditions and measure	es				
		han 1 to 3 air changes per hour)				
Local exhaust ventilation - e	- ,		90 %			
	ck that the risk management r	neasures in place are being used				
Other conditions affecting	y workers exposure					
ndoor						
Maximum process temperat	ture		≤ 56 °C			
.34. Control of worker exp	osure: Equipment cleaning	and maintenance (PROC8a, PROC2	8)			
PROC8a	Transfer of substance or m	nixture (charging and discharging) at no	n-dedicated facilities			
PROC28	Manual maintenance (clea	ning and repair) of machinery				
Product (article) characte	ristics					
Physical form of product		Liquid				
Concentration of substance	in product	≤ 100 %				
Amount used (or containe	ed in articles), frequency an	d duration of use/exposure				
Exposure duration	,, ,	≤ 8 h/day				
Technical and organisatio	nal conditions and measure	98				
	ck that the risk management r	neasures in place are being used				
·		ion, hygiene and health evaluation	'			
	a minimum efficiency of (%):	, ,,	90 %			
			(APF 10)			
Other conditions affecting	y workers exposure					
indoor,and/or,Outdoor						
Maximum process temperat	ture		≤ 56 °C			
<u>'</u>	<u> </u>	and maintenance (PROC8a, PROC2	<u>′</u>			
PROC8a		nixture (charging and discharging) at no	n-dedicated facilities			
PROC28	Manual maintenance (clea	ning and repair) of machinery				
Product (article) characte	ristics					
		Liquid				
Physical form of product Concentration of substance		Liquid ≤ 100 %				
Physical form of product Concentration of substance	in product					
Physical form of product Concentration of substance Amount used (or contained)	in product	≤ 100 %				
Physical form of product Concentration of substance Amount used (or containe Exposure duration	in product ed in articles), frequency an	≤ 100 % d duration of use/exposure ≤ 8 h/day				
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product ed in articles), frequency and onal conditions and measure	≤ 100 % d duration of use/exposure ≤ 8 h/day es	30 %			
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to chec	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the	≤ 100 % d duration of use/exposure ≤ 8 h/day	30 %			
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to checorrectly and operation con-	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the ck that the risk management reditions followed.	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour).	30 %			
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Efficiency Supervision in place to checorrectly and operation cond Other conditions affecting	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the ck that the risk management reditions followed.	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour).	30 %			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation cond Other conditions affecting	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the sk that the risk management re ditions followed. g workers exposure	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour).	30 % ≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to chectorrectly and operation cond Other conditions affecting Indoor Maximum process temperation	in product ed in articles), frequency and onal conditions and measure general ventilation (not less the color than the risk management re ditions followed. g workers exposure	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour). measures in place are being used	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Fechnical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation conc Other conditions affecting Indoor Maximum process temperat 36. Control of worker exp	in product ed in articles), frequency and onal conditions and measure general ventilation (not less the ck that the risk management re ditions followed. g workers exposure ture cosure: Equipment cleaning	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour).	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation concentration Other conditions affecting Indoor Maximum process temperation 36. Control of worker expenses	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the ck that the risk management re ditions followed. g workers exposure ture cosure: Equipment cleaning Transfer of substance or measure	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC2)	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation conc Other conditions affecting Indoor Maximum process temperate 36. Control of worker expenses PROC8a PROC28	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the conditions followed. g workers exposure ture cosure: Equipment cleaning Transfer of substance or m Manual maintenance (cleaning)	≤ 100 % d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC2) mixture (charging and discharging) at no escentiation. A procedure of the procedure	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Fechnical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation conc Other conditions affecting Indoor Maximum process temperate Use Control of worker expended PROC8a PROC28 Product (article) character	in product ad in articles), frequency and anal conditions and measure general ventilation (not less the conditions followed. g workers exposure ture cosure: Equipment cleaning Transfer of substance or m Manual maintenance (cleaning)	d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC2) nixture (charging and discharging) at no ning and repair) of machinery	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to chectorrectly and operation contained Other conditions affecting Indoor Maximum process temperate 36. Control of worker expended PROC8a PROC28 Product (article) character Physical form of product	in product ad in articles), frequency and a conditions and measure general ventilation (not less that the risk management reditions followed. If workers exposure are cosure: Equipment cleaning transfer of substance or management of the cosure of the c	d duration of use/exposure ≤ 8 h/day es han 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC2) nixture (charging and discharging) at no ning and repair) of machinery Liquid	≤ 56 °C			
Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisation Provide a good standard of Efficiency Supervision in place to checorrectly and operation concentration Other conditions affecting indoor Maximum process temperate .36. Control of worker exp PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	in product ad in articles), frequency and a conditions and measure general ventilation (not less that the risk management reditions followed. If workers exposure are cosure: Equipment cleaning transfer of substance or management of the cosure of the c	≤ 100 % d duration of use/exposure ≤ 8 h/day es than 3 to 5 air changes per hour). measures in place are being used and maintenance (PROC8a, PROC2) mixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 %	≤ 56 °C			

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisational conditions and measures	
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	
Other conditions affecting workers exposure	
outdoor	
Maximum process temperature	≤ 56 °C

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Draduct (artials) abarestori	
PROC28	Manual maintenance (cleaning and repair) of machinery
PROC8a	I ransfer of substance or mixture (charging and discharging) at non-dedicated facilities

Product (article) characteristics

Maximum process temperature

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least	90 %
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	

Other conditions affecting workers exposure

indoor	
Maximum process temperature	≤ 56 °C

7.3. Exposure estimation and reference to its source

7.3.1. Environmental release and exposure Use in rubber production and processing (ERC6d)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	1 %	ESVOC SPERC 4.19.v1
Release to waste water from process	900 kg/day	ESVOC SPERC 4.19.v1
Release fraction to air from process	1 %	ESVOC SPERC 4.19.v1
Release to air from process	9000 kg/day	ESVOC SPERC 4.19.v1
Release fraction to soil from process	0.01 %	ESVOC SPERC 4.19.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	6.352	10.6	0.599	EUSES v2.1.2
Marine water	mg/l	0.63	1.06	0.594	EUSES v2.1.2
Freshwater sediment	mg/kg	27.86	30.4	0.916	EUSES v2.1.2
Marine water sediment	mg/kg	2.764	3.04	0.909	EUSES v2.1.2
Sewage treatment plant	mg/l	56.04	100	0.56	EUSES v2.1.2
Soil	mg/kg	0.867	29.5	0.029	EUSES v2.1.2

7.3.2. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m ³	0	ECETOC TRA worker

7.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 88/265

Sum RCR - Long-term -		0.057	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
7.3.4. Worker exposure Use in cle	osed batch process (synthesis or fo	ormulation); With occasional control	led exposure (PROC3)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
7.3.5. Worker exposure Chemical	production where opportunity for	exposure arises (PROC4)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.237	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
	perations (open systems) (PROC5)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
·	perations (open systems) (PROC5)		
Route of evaceure and tune	Evnacura actimata	DOD	Method
Route of exposure and type of effects	Exposure estimate	RCR	Wethod
of effects Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects		0.074	
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³	0.074 0.35 0.424	ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³	0.074	ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5)	0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate	0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day	0.074 0.35 0.424 0.698 RCR 0.007	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate	0.074 0.35 0.424 0.698 RCR 0.007 0.05	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.074 0.35 0.424 0.698 RCR 0.007 0.05	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ perations (open systems) (PROC5)	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term -	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ perations (open systems) (PROC5) Exposure estimate	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ perations (open systems) (PROC5) Exposure estimate 13.71 mg/kg bw/day	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1 RCR	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ perations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ perations (open systems) (PROC5) Exposure estimate 13.71 mg/kg bw/day	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1 RCR 0.074 0.35	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ Derations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ Derations (open systems) (PROC5) Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1 RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ Derations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ Derations (open systems) (PROC5) Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1 RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.8. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.9. Worker exposure Mixing of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.10. Worker exposure Calender Route of exposure and type	13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ Derations (open systems) (PROC5) Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ Derations (open systems) (PROC5) Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ Pering (including Banburys) (PROC6)	0.074 0.35 0.424 0.698 RCR 0.007 0.05 0.057 0.1 RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.3.11. Worker exposure Calende	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
<u> </u>	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1000 m a/m3	0.497	ECETOC TRA wards a
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.743 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.065	ECETOC TRA worker
7.3.14. Worker exposure Industria		0.1	EGETGG TIVI WORKER
	op. ajg (o)	DOD	Method
	Evnacura actimata		
Route of exposure and type of effects	Exposure estimate	RCR	
Route of exposure and type of effects Dermal - Long-term - systemic effects	2.143 mg/kg bw/day	0.012	ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	· ·	0.012 0.005	
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³	0.012 0.005 0.017	ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³	0.012 0.005	ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³	0.012 0.005 0.017	ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriation effects Route of exposure and type of effects Dermal - Long-term - systemic	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7)	0.012 0.005 0.017 0.1	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industrial Route of exposure and type of effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate	0.012 0.005 0.017 0.1	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriat Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriat Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872 0.2	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriat Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriat Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872 0.2	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industriation Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfer Route of exposure and type	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³ of substance or mixture (charging	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872 0.2 and discharging) at non-dedicated	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industrial Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³ of substance or mixture (charging) Exposure estimate	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872 0.2 and discharging) at non-dedicated RCR 0.074 0.35	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Industrial Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfer Route of exposure and type of effects Dermal - Long-term - systemic effects	2.143 mg/kg bw/day 5.5 mg/m³ 242 mg/m³ al spraying (PROC7) Exposure estimate 8.572 mg/kg bw/day 1000 mg/m³ 484 mg/m³ of substance or mixture (charging) Exposure estimate 13.71 mg/kg bw/day	0.012 0.005 0.017 0.1 RCR 0.046 0.826 0.872 0.2 and discharging) at non-dedicated RCR 0.074	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker acilities (PROC8a) Method ECETOC TRA worker

08/08/2022 (Revision date) IE - en 90/265

	of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
•	of substance or mixture (charging	9 9	· · · · · · · · · · · · · · · · · · ·
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
nhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
·	of substance or mixture (charging	<u> </u>	· · · · · · · · · · · · · · · · · · ·
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
	of substance or mixture into small		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
nhalation - Long-term - systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
22. Worker exposure Roller ap Route of exposure and type of effects	pplication or brushing (PROC10) Exposure estimate	RCR	Method
Dermal - Long-term - systemic	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
effects nhalation - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects Sum RCR - Long-term -		0.497	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
23. Worker exposure Roller ap	Exposure estimate	RCR	Method
23. Worker exposure Roller ap		RCR 0.147	Method ECETOC TRA worker

Sum RCR - Long-term -		0.497	
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.24. Worker exposure Roller ap		0.000	EGETGG TRA WORKER
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
<u> </u>	oplication or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	240 m a/m3	0.197	ECETOC TRAdi
Acute - Local - Inhalation	242 mg/m³ nt of articles by dipping and pourin	0.1 g (PROC13)	ECETOC TRA worker
Route of exposure and type	Exposure estimate	g (PROC13) RCR	Method
of effects			
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker
	nt of articles by dipping and pourin		ECETOC TRA Worker
Route of exposure and type	Exposure estimate	RCR	Method
of effects			ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term -	13.71 mg/kg bw/day 60.5 mg/m ³	0.074	ECETOC TRA worker
systemic effects Sum RCR - Long-term -	60.5 mg/m²	0.124	ECETOC TRA WOIKEI
systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	nt of articles by dipping and pourin	g (PROC13)	
of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker
	nt of articles by dipping and pourin		LOLIGO INA WOIKEI
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	ng, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.368	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	g, compression, extrusion, pelettisa	ation, granulation (PROC14)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.068	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	g, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4600 m a/m3	0.368	ECETOC TRA
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
<u>'</u>	g, compression, extrusion, pelettis	· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.343 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term -	60.5 mg/m ³	0.05	ECETOC TRA worker
systemic effects			
Sum RCR - Long-term - systemic effects	242 m a/m³	0.052	ECETOC TDA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme	nt cleaning and maintenance (PRO	0.1 C8a, PROC28)	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects	nt cleaning and maintenance (PRO Exposure estimate	0.1	Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day	0.1 C8a, PROC28) RCR	Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate	0.1 C8a, PROC28) RCR 0.074 0.05	Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124	Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1	Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1	Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.36. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698 C8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.36. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Dermal - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nt cleaning and maintenance (PRO Exposure estimate	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698 C8a, PROC28) RCR 0.074 0.35	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.34. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.35. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 7.3.36. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nt cleaning and maintenance (PRO Exposure estimate 13.71 mg/kg bw/day	0.1 C8a, PROC28) RCR 0.074 0.05 0.124 0.1 C8a, PROC28) RCR 0.074 0.35 0.424 0.698 C8a, PROC28) RCR 0.074	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

08/08/2022 (Revision date) IE - en 93/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

oute of exposure and type effects	Exposure estimate	RCR	Method
ermal - Long-term - systemic fects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
halation - Long-term - ystemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
um RCR - Long-term - ystemic effects		0.057	
cute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
. Guidance to Downstre 1. Environment	am User to evaluate wi	hether he works inside	the boundaries set by the ES
Guidance - Environment			which may not be applicable to all sites; thus, specific risk management measures
2. Health			

guarantee safe use for workers.

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

8. AC SE08: Polymer manufacturing

.1. Title section				
Polymer manufacturing		ES Ref.: A		Association ref code: IS
·		ES Type:	Worker	
Environment				
CS 1	Polymer manufacturing		ERC6d	
Worker				
CS 2	Chemical production or refinery likelihood of exposure or proces containment conditions		PROC1	
CS 3	Chemical production or refinery process with occasional controll with equivalent containment cor	ed exposure or processes	PROC2	
CS 4	Manufacture or formulation in the closed batch processes with occessors with equipment of processes with equipment of the condition	casional controlled	PROC3	
CS 5	Chemical production where opp arises	ortunity for exposure	PROC4	
CS 6	Mixing operations (open system	s)	PROC5	
CS 7	Mixing operations (open system	s)	PROC5	
CS 8	Mixing operations (open system	s)	PROC5	
CS 9	Mixing operations (open system	s)	PROC5	
CS 10	Calendering (including Banbury	5)	PROC6	
CS 11	Calendering (including Banburys	5)	PROC6	
CS 12	Calendering (including Banburys	s)	PROC6	
CS 13	Calendering (including Banburys	s)	PROC6	
CS 14	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 15	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 16	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 17	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 18	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 19	Transfer of substance or mixture (dedicated filling line, including v		PROC9	
CS 20	Roller application or brushing		PROC10	
CS 21	Roller application or brushing		PROC10	
CS 22	Roller application or brushing		PROC10	
CS 23	Roller application or brushing		PROC10	
CS 24	Treatment of articles by dipping	and pouring	PROC13	
CS 25	Treatment of articles by dipping	and pouring	PROC13	
CS 26	Treatment of articles by dipping	and pouring	PROC13	
CS 27	Treatment of articles by dipping	and pouring	PROC13	
CS 28	Tabletting, compression, extrusi granulation	on, pelettisation,	PROC14	
CS 29	Tabletting, compression, extrusi granulation	on, pelettisation,	PROC14	
CS 30	Tabletting, compression, extrusi granulation	on, pelettisation,	PROC14	
CS 31	Tabletting, compression, extrusi granulation	on, pelettisation,	PROC14	
CS 32	Laboratory activities		PROC15	
CS 33	Equipment cleaning and mainte	nance	PROC8a, PROC28	
CS 34	Equipment cleaning and mainte	nance	PROC8a, PROC28	
CS 35	Equipment cleaning and mainte	nance	PROC8a, PROC28	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Annual site tonnage (tensyear): Conditions and measures related to sewage treatment plant Assumed domestic sewage treatment plant flow Sludge treatment technique: Souther technique : Souther technique : South related to treatment of waste (including article waste) Dispose of waste in accordance with environmental legislation 2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with univalent containment conditions (PROC1) PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1) Physical form of product Liquid Concentration of substance in product \$100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$2 to Nata Technical and organisational conditions and measures Chemical production or refinery in closed sposure or processes With equivalent containment conditions Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure Indoor, and/or, Outdoor Maximum processes temperature \$56 °C Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$2 to Nata Chemical production or refinery in closed continuous process with occasional controlled e	AS-No.: 67-64-1 Product form: Su	ubstance Physical state: Liquid	Substance type: Mono-constituent	
2. Conditions of use affecting exposure. 2. Conditions of use affecting exposure annual acturing (ERC6d) 2. Let or feed the process regulators in polymerisation processes at industrial site (inclusion or not into/onto article) 2. Control of environmental exposure. 2. Conditions and measures related to sewage treatment plant 3. 2000 by: 3. 2	CS 36	Equipment cleaning a	and maintenance	PROC8a, PROC28
Security Control of environmental exposure: Polymer manufacturing (ERG6d)	Processes, tasks, activities of	covered Use a	t industrial sites (IS)	
Security Control of environmental exposure: Polymer manufacturing (ERG6d)	.2. Conditions of use a	ffecting exposure		
Amount used, frequency and duration of use (or from service life) Daily amount per site			ıfacturing (ERC6d)	
Daily amount per site Annual site tonnage (tons/year): \$ 27000 tyr Conditions and measures related to sewage treatment plant Assured domestic sewage treatment plant to the controlled application to agricultural soil Conditions and measures related to treatment of waste (including article waste) Dispose of waste in accordance with environmental legislation 22 Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with utvalent containment conditions (PROC1) PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1) Product (article) characteristics Physical form of product Concentration of substance in product Annount used (or contained in articles), frequency and duration of use/exposure Exposure duration or refinery in closed process without likelihood of exposure or processes. Chemical production or refinery in closed process without likelihood of exposure or processes. Chemical production or refinery in closed process without likelihood of exposure or processes. Supervision in placin recording the resolution of exposure or processes. Supervision in placin recording the resolution of exposure or processes. Supervision in placin recording workers exposure Indoor, and/or, Outdoor Maximum process temperature 2 56 °C 2. Centrol of worker exposures. Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions or exposure or processes with occasional controlled exposure or processes with equivalent containment conditions Product (article) characteristics Product (article) characteristics with equivalent containment conditions Supervision in place to ch	ERC6d	Use of reactive process reg	julators in polymerisation processes at	industrial site (inclusion or not into/onto article)
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Conditions and measures related to sewage treatment plant Assumed domestic sewage treatment plant infow 2000 m²/d	Daily amount per site		•	
Assumed domestic sewage treatment plant flow 2000 m²/d Studge treatment technique : Controlled application to agricultural soil Conditions and measures related to treatment of waste (including article waste) Dispose of waste in accordance with environmental legislation	Annual site tonnage (tons/ye	ar):	≤ 27000 t/yr	
Sludge treatment technique : Controlled application to agricultural soil Conditions and measures related to treatment of waste (including article waste) Dispose of waste in accordance with environmental legislation 22. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with utivalent containment conditions (PROC1) PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment or or processes with equivalent containment or or product (article) characteristics Physical form of product Liquid Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 h/day Technical and organisational conditions and measures Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure Indoor, and/or, Judfoor Maximum process temperature \$ 56 °C 23. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2) Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Sup	Conditions and measures i	related to sewage treatmen		
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Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration S	Product (article) characteri	stics		
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PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition Product (article) characteristics Physical form of product Liquid				osed batch processes with occasional
Physical form of product Liquid	<u> </u>	Manufacture or formulation	in the chemical industry in closed batc	h processes with occasional controlled exposure
Physical form of product Liquid	Product (article) characteri	stics		
Concentration of substance in product ≤ 100 %	Physical form of product		Liquid	
·	Concentration of substance i	n product	≤ 100 %	

08/08/2022 (Revision date) IE - en 96/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or cor	tained in articles), frequency a	and duration of use/exposure	
Exposure duration	,, .,,	≤ 8 h/day	
Technical and organi	sational conditions and meas	ures	
		With occasional controlled exposure	
<u> </u>	,	t measures in place are being used	
correctly and operation	n conditions followed.	, ,	
	ecting workers exposure		
Indoor,and/or,Outdoor			
Maximum process tem	·		≤ 56 °C
		on where opportunity for exposure ar	ises (PROC4)
PROC4	Chemical production who	ere opportunity for exposure arises	
Product (article) char	racteristics		
Physical form of produ	ct	Liquid	
Concentration of subst	ance in product	≤ 100 %	
Amount used (or con	tained in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organi	sational conditions and meas	ures	
Supervision in place to correctly and operation		t measures in place are being used	
Other conditions affe	ecting workers exposure		
Indoor,and/or,Outdoor			
Maximum process tem	perature		≤ 56 °C
2.6. Control of worker	exposure: Mixing operations	(open systems) (PROC5)	
PROC5	Mixing or blending in bat	ch processes	
Product (article) char	racteristics		
Physical form of produ	ct	Liquid	
Concentration of subst	ance in product	≤ 100 %	
Amount used (or con	tained in articles), frequency a	and duration of use/exposure	
Exposure duration	, , ,	≤ 8 h/day	
Technical and organi	sational conditions and meas	ures	
	check that the risk managemen	t measures in place are being used	
Conditions and meas	sures related to personal prote	ction, hygiene and health evaluation	
Wear a respirator prov	iding a minimum efficiency of (%):	90 % (APF 10)
Other conditions affe	ecting workers exposure		
Indoor,and/or,Outdoor			
Maximum process tem	perature		≤ 56 °C
2.7. Control of worker	exposure: Mixing operations	(open systems) (PROC5)	
PROC5	Mixing or blending in bat	ch processes	
Product (article) char	acteristics		
Physical form of produ	ct	Liquid	
Concentration of subst	ance in product	≤ 100 %	
Amount used (or con	tained in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organi	sational conditions and meas	ures	
Efficiency	,	s than 3 to 5 air changes per hour).	30 %
Supervision in place to correctly and operation		t measures in place are being used	
	ecting workers exposure		
Other conditions affe			
Other conditions affe			

08/08/2022 (Revision date) IE - en 97/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

8.2.8. Control of worker expo	sure: Mixing operations (o	pen systems) (PROC5)	
PROC5	Mixing or blending in batch	n processes	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
	<u>'</u>	1 1 1	
·	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
	nal conditions and measur		
		han 1 to 3 air changes per hour)	
Local exhaust ventilation - e Supervision in place to chec correctly and operation cond	ck that the risk management r	neasures in place are being used	90 %
Other conditions affecting	y workers exposure		
indoor			
Maximum process temperat	ture		≤ 56 °C
8.2.9. Control of worker expo	sure: Mixing operations (o	pen systems) (PROC5)	
PROC5	Mixing or blending in batch	n processes	
Product (article) character	<u> </u>		
Physical form of product	101.00	Liquid	
Concentration of substance	in product	≤ 100 %	
	•		
Amount used (or containe Exposure duration	ed in articles), frequency an	d duration of use/exposure ≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
	ck that the risk management r	measures in place are being used	
Other conditions affecting	workers exposure		
Other conditions affecting outdoor	y workers exposure		
outdoor	•		≤ 320 °C
outdoor Maximum process temperat	ture	ing Banburys) (PROC6)	≤ 320 °C
outdoor	ture	ing Banburys) (PROC6)	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6	ture posure: Calendering (include Calendering operations	ing Banburys) (PROC6)	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character	ture posure: Calendering (include Calendering operations		≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product	ture cosure: Calendering (include Calendering operations ristics	Liquid	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance	ture posure: Calendering (include Calendering operations ristics in product	Liquid ≤ 100 %	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe	cosure: Calendering (included Calendering operations ristics in product and in articles), frequency and	Liquid ≤ 100 % d duration of use/exposure	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance	cosure: Calendering (included Calendering operations ristics in product and in articles), frequency and	Liquid ≤ 100 %	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	cosure: Calendering (included Calendering operations ristics in product and in articles), frequency and	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	consure: Calendering (included Calendering operations ristics in product ced in articles), frequency and conditions and measures that the risk management in the consumption of the con	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checcorrectly and operation cond	calendering (included Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management reditions followed.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 320 °C
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond Conditions and measures	calendering (included Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management reditions followed.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	≤ 320 °C 90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond Conditions and measures	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measure that the risk management inditions followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 %
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation conc Conditions and measures Wear a respirator providing	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measure that the risk management inditions followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 %
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting	calendering (included Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 %
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measure that the risk management reditions followed. related to personal protect a minimum efficiency of (%): g workers exposure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measure that the risk management reditions followed. related to personal protect a minimum efficiency of (%): g workers exposure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6	calendering (included Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (included Calendering operations	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6 Product (article) character	calendering (included Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (included Calendering operations	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ing Banburys) (PROC6)	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6	calendering (include Calendering operations ristics in product conditions and measure that the risk management of ditions followed. related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (include Calendering operations ristics	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management reditions followed. related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (include Calendering operations ristics	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ing Banburys) (PROC6) Liquid ≤ 100 %	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management reditions followed. related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (include Calendering operations ristics	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used sion, hygiene and health evaluation ing Banburys) (PROC6) Liquid ≤ 100 % d duration of use/exposure	90 % (APF 10)
outdoor Maximum process temperat 8.2.10. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,Outdoor Maximum process temperat 8.2.11. Control of worker exp PROC6 Product (article) character Physical form of product Concentration of substance	calendering (include Calendering operations ristics in product and in articles), frequency and conditions and measures that the risk management reditions followed. related to personal protect a minimum efficiency of (%): g workers exposure ture cosure: Calendering (include Calendering operations ristics	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ing Banburys) (PROC6) Liquid ≤ 100 %	90 % (APF 10)

08/08/2022 (Revision date) IE - en 98/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisati			
Dravida a good standard c		neasures ot less than 3 to 5 air changes per hour).	30 %
Efficiency		ement measures in place are being used	30 %
correctly and operation cor		eniem measures in place are being used	
Other conditions affecting	ng workers exposure		
indoor			
Maximum process tempera	ature		≤ 56 °C
.12. Control of worker ex	posure: Calendering	(including Banburys) (PROC6)	
PROC6	Calendering operat	tions	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substanc	e in product	≤ 100 %	
Amount used (or contair	ned in articles), freque	ency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	ional conditions and n	neasures	
		ement measures in place are being used	
correctly and operation cor	9	, , , , , , , , , , , , , , , , , , , ,	
Other conditions affecting	ng workers exposure		
outdoor			
Maximum process tempera	ature		≤ 320 °C
.13. Control of worker ex	posure: Calendering	(including Banburys) (PROC6)	
PROC6	Calendering operat	tions	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substanc	e in product	≤ 100 %	
Amount used (or contair	ned in articles), freque	ency and duration of use/exposure	
Exposure duration	,,	≤ 8 h/day	
Technical and organisati	ional conditions and n	magelirae	
		ot less than 1 to 3 air changes per hour)	
Local exhaust ventilation -	· ·	or roce than the earn enangee per meany	90 %
	eck that the risk manage	ement measures in place are being used	
concent and operation of			
Other conditions affecting	ng workers exposure		
Other conditions affecting	ng workers exposure		
Other conditions affecting indoor			≤ 56 °C
Other conditions affecting indoor Maximum process temperature of the conditions affect in the conditions after a condition a condition after a condition a condition after a condition and a condition a condition a condition a condition a condition accordition and a condition a condition a condition a condition according a condition according a condition according a condition a co	ature	ubstance or mixture (charging and discha	≤ 56 °C rging) at non-dedicated facilities (PROC8a)
Other conditions affection indoor Maximum process temperature of the conditions of t	ature posure: Transfer of s	ubstance or mixture (charging and dischance or mixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperated. 14. Control of worker expended.	ature posure: Transfer of s Transfer of substar		rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperated. 14. Control of worker expressed PROC8a Product (article) characters	ature posure: Transfer of s Transfer of substar		rging) at non-dedicated facilities (PROC8a)
Other conditions affection indoor Maximum process temperared. 2.14. Control of worker ex	ature posure: Transfer of s Transfer of substareristics	nce or mixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperate. 2.14. Control of worker extended PROC8a Product (article) character. Physical form of product. Concentration of substance.	ature sposure: Transfer of s Transfer of substar eristics e in product	nce or mixture (charging and discharging) at n Liquid ≤ 100 %	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperated. 14. Control of worker extended PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or contains)	ature sposure: Transfer of s Transfer of substar eristics e in product	Liquid ≤ 100 % cncy and duration of use/exposure	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperate. 1.4. Control of worker extended a product (article) character. Physical form of product Concentration of substance. Amount used (or contains Exposure duration.	ature sposure: Transfer of s Transfer of substar eristics e in product ned in articles), freque	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperate. 2.14. Control of worker extended a product (article) character. Physical form of product Concentration of substance. Amount used (or contain Exposure duration. Technical and organisation.	ature (posure: Transfer of s Transfer of substar eristics e in product ned in articles), freque	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day	rging) at non-dedicated facilities (PROC8a)
Other conditions affecting indoor Maximum process temperature 14. Control of worker expended PROC8a Product (article) character Physical form of product Concentration of substance Amount used (or containst Exposure duration Technical and organisation Provide a good standard of Efficiency. Supervision in place to chees	ature posure: Transfer of s Transfer of substar eristics e in product ned in articles), freque conal conditions and more general ventilation (not each that the risk manage)	Liquid ≤ 100 % cocy and duration of use/exposure ≤ 8 h/day cocy and duration of use/exposure	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
Other conditions affecting indoor Maximum process temperated. 14. Control of worker expredict (article) characters (article) character	ature cposure: Transfer of s Transfer of substanteristics e in product med in articles), freque conal conditions and r of general ventilation (no cock that the risk manage inditions followed.	Liquid ≤ 100 % cncy and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour).	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
Other conditions affecting indoor Maximum process temperated. 14. Control of worker extended and the product (article) characters of product used (or contain Exposure duration Technical and organisation provide a good standard of Efficiency Supervision in place to characters of proceedings of product of the conditions affecting indoor of the provided and operation conditions affecting indoor of the product of the provided and operation conditions affecting indoor of the provided and operation conditions affecting indoor of the provided and provided articles.	ature cposure: Transfer of s Transfer of substanteristics e in product med in articles), freque conal conditions and r of general ventilation (no cock that the risk manage inditions followed.	Liquid ≤ 100 % cncy and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour).	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
Other conditions affectinindoor Maximum process tempera .14. Control of worker ex PROC8a Product (article) characte Physical form of product Concentration of substanc Amount used (or contain Exposure duration Technical and organisati Provide a good standard of	ature sposure: Transfer of s Transfer of substar eristics e in product ned in articles), freque ional conditions and r of general ventilation (no eck that the risk manage inditions followed. ng workers exposure	Liquid ≤ 100 % cncy and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour).	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities
Other conditions affecting indoor Maximum process temperated. 14. Control of worker extended and the product (article) characters. Product (article) characters. Physical form of product Concentration of substance. Amount used (or contains Exposure duration. Technical and organisation. Provide a good standard of Efficiency. Supervision in place to che correctly and operation conditions affecting indoor. Maximum process temperated.	ature sposure: Transfer of s Transfer of substance in product med in articles), freque sional conditions and more general ventilation (not each that the risk manage inditions followed. mg workers exposure ature	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 3 to 5 air changes per hour). ement measures in place are being used	rging) at non-dedicated facilities (PROC8a) on-dedicated facilities 30 %

08/08/2022 (Revision date) IE - en 99/265

Product (article) character	ristics		
Physical form of product	131103	Liquid	
Concentration of substance	in product	≤ 100 %	
	•		
•	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
	general ventilation (not less t	han 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to checcorrectly and operation cond		measures in place are being used	
Other conditions affecting	workers exposure		
indoor	•		
Maximum process temperat	ture		≤ 56 °C
		ce or mixture (charging and dischar	ging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at no	
Product (article) character	rietice	, 5 6	
Physical form of product	isucs	Liquid	
Concentration of substance	in product	≤ 100 %	
	·		
	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
Provide a good standard of	general ventilation (not less t	han 1 to 3 air changes per hour)	
Local exhaust ventilation - e Supervision in place to chec correctly and operation cond	ck that the risk management r	measures in place are being used	90 %
Other conditions affecting			
indoor	,		
Maximum process temperat	ture		≤ 56 °C
2.17. Control of worker exp	osure: Transfer of substan	ce or mixture (charging and dischar	ging) at non-dedicated facilities (PROC8a)
PROC8a		nixture (charging and discharging) at no	
	Transfer of Cabotarioo of It	intare (charging and discharging) at the	ni-dedicated facilities
Product (article) character		include (orlanging and disoridinging) at the	in-ueulcateu faciiities
Product (article) character		, , , , , , , , , , , , , , , , , , , ,	m-dedicated facilities
Physical form of product	ristics	Liquid	nr-dedicated facilities
Physical form of product Concentration of substance	ristics in product	Liquid ≤ 100 %	m-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe	ristics in product	Liquid ≤ 100 % d duration of use/exposure	m-dedicated facilities
Physical form of product Concentration of substance	ristics in product	Liquid ≤ 100 %	m-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	ristics in product ed in articles), frequency an	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	m-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond	ristics in product ed in articles), frequency an enal conditions and measur ek that the risk management reditions followed.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	in-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures	ristics in product ed in articles), frequency an anal conditions and measur ck that the risk management r ditions followed. related to personal protect	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation conc Conditions and measures Wear a respirator providing	in product ad in articles), frequency an enal conditions and measure that the risk management relations followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 % (APF 10)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting	in product ad in articles), frequency an enal conditions and measure that the risk management relations followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 %
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor	ristics in product ad in articles), frequency and anal conditions and measur sk that the risk management r ditions followed. related to personal protect a minimum efficiency of (%): g workers exposure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 % (APF 10)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat	ristics in product ed in articles), frequency and anal conditions and measur ck that the risk management r ditions followed. related to personal protect a minimum efficiency of (%): y workers exposure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10) ≤ 320 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp	in product ad in articles), frequency and a conditions and measure that the risk management related to personal protect a minimum efficiency of (%): y workers exposure aure cosure: Transfer of substantial and articles.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharge)	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b	ristics in product ad in articles), frequency and an articles, frequency and an articles and measure that the risk management reditions followed. related to personal protect a minimum efficiency of (%): y workers exposure ture rosure: Transfer of substance or management reditions followed.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b Product (article) character	ristics in product ad in articles), frequency and an articles, frequency and an articles and measure that the risk management reditions followed. related to personal protect a minimum efficiency of (%): y workers exposure ture rosure: Transfer of substance or management reditions followed.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definiture (charging and discharging) at definiture (charging and discharging) at definiture (charging and discharging)	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b Product (article) character Physical form of product	in product ad in articles), frequency and a conditions and measure that the risk management related to personal protect a minimum efficiency of (%): y workers exposure aure cosure: Transfer of substant of substant of substance or minimum efficiency or minimum efficiency of substant of substance or minimum efficiency or minimum efficiency of substance or minimum efficiency or minim	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definiture (charging and discharging) at definiture	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b Product (article) character	in product ad in articles), frequency and a conditions and measure that the risk management related to personal protect a minimum efficiency of (%): y workers exposure aure cosure: Transfer of substant of substant of substance or minimum efficiency or minimum efficiency of substant of substance or minimum efficiency or minimum efficiency of substance or minimum efficiency or minim	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definiture (charging and discharging) at definiture (charging and discharging) at definiture (charging and discharging)	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperate 2.18. Control of worker exp PROC8b Product (article) character Physical form of product Concentration of substance	in product and in articles), frequency and and conditions and measures that the risk management reditions followed. related to personal protect a minimum efficiency of (%): y workers exposure ture ture tosure: Transfer of substant Transfer of substance or maristics in product	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definiture (charging and discharging) at definiture	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperate 2.18. Control of worker exp PROC8b Product (article) character Physical form of product Concentration of substance	in product and in articles), frequency and and conditions and measures that the risk management reditions followed. related to personal protect a minimum efficiency of (%): y workers exposure ture ture tosure: Transfer of substant Transfer of substance or maristics in product	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definitude Liquid ≤ 100 %	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation conc Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	in product and in articles), frequency and and conditions and measure of the that the risk management related to personal protect a minimum efficiency of (%): y workers exposure and the transfer of substant of the transfer of substance or management related to personal protect a minimum efficiency of (%): Transfer of substance or management related to personal protect and the transfer of substance or management related to the transfer of substance or manage	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definition Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperat 2.18. Control of worker exp PROC8b Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checo	in product and in articles), frequency and and conditions and measure that the risk management related to personal protect a minimum efficiency of (%): y workers exposure ture ture toosure: Transfer of substant Transfer of substance or management related to personal protect a minimum efficiency of (%): y workers exposure ture toosure: Transfer of substant ristics in product and in articles), frequency and and conditions and measure that the risk management related in articles in management related in management related in articles in management related in	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharging) at definition Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting indoor,and/or,outdoor Maximum process temperate 2.18. Control of worker exp PROC8b Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product and in articles), frequency and and conditions and measure that the risk management related to personal protect a minimum efficiency of (%): y workers exposure ture ture toosure: Transfer of substant Transfer of substance or management related to personal protect a minimum efficiency of (%): y workers exposure ture toosure: Transfer of substant ristics in product and in articles), frequency and and conditions and measure that the risk management related in articles in management related in management related in articles in management related in	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used ion, hygiene and health evaluation ce or mixture (charging and discharginixture (charging and discharging) at definitude Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	90 % (APF 10) ≤ 320 °C ging) at dedicated facilities (PROC8b)

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
2.19. Control of worker exposure: Transfer of substan PROC9)	ce or mixture into small containers	(dedicated filling line, including weighing)
PROC9 Transfer of substance or p	reparation into small containers (dedic	cated filling line, including weighing)
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Supervision in place to check that the risk management r correctly and operation conditions followed.	neasures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
2.20. Control of worker exposure: Roller application o	r brushing (PROC10)	
PROC10 Roller application or brush	ing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Supervision in place to check that the risk management r correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
2.21. Control of worker exposure: Roller application o	r brushing (PROC10)	
PROC10 Roller application or brush	ing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Provide a good standard of general ventilation (not less t		30 %
Efficiency Supervision in place to check that the risk management r correctly and operation conditions followed.	neasures in place are being used	
Other conditions affecting workers exposure		
Indoor		
Maximum process temperature		≤ 56 °C
2.22. Control of worker exposure: Roller application o	r brushing (PROC10)	
PROC10 Roller application or brush		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an		
Amount about or contained in articles), lieudelicy all	a aaranon or userexposure	
Exposure duration	≤ 8 h/day	

08/08/2022 (Revision date) IE - en 101/265

AS-No.: 67-64-1 Product form: S	abstance i nysicai state. Liquid	71	
Technical and organisatio	nal conditions and measur	es	
Supervision in place to chec correctly and operation cond		measures in place are being used	
Conditions and measures	related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):			90 % (APF 10)
Other conditions affecting	workers exposure		
Indoor,and/or,outdoor			
Maximum process temperat	ure		≤ 56 °C
.2.23. Control of worker exp	osure: Roller application o	r brushing (PROC10)	
PROC10	Roller application or brush	ing	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
		han 1 to 3 air changes per hour)	
Local exhaust ventilation - e	• ,	man i to o an onangoo por noar,	90 %
	k that the risk management r	measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperat	ure		≤ 56 °C
.2.24. Control of worker exp	osure: Treatment of article	s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) character	istics		
Physical form of product Liquid			
Concentration of substance in product ≤ 100 %			
Amount used (or containe	d in articles) frequency an	d duration of use/exposure	
Exposure duration	u u,,quo, u	≤ 8 h/day	
•	nal canditions and massur	,	
	nal conditions and measur	han 3 to 5 air changes per hour).	30 %
Efficiency	k that the risk management r	measures in place are being used	30 /6
Other conditions affecting			
indoor	2 3p 2 2 31 0		
Maximum process temperat	ure		≤ 56 °C
		s by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Due deset (entials) about star	ictics		
Product (article) character			
Product (article) character Physical form of product	131103	Liquid	
Physical form of product		Liquid ≤ 100 %	
Physical form of product Concentration of substance	in product	≤ 100 %	
Physical form of product Concentration of substance	in product	·	
Physical form of product Concentration of substance Amount used (or containe Exposure duration	in product	≤ 100 % d duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product d in articles), frequency an nal conditions and measur k that the risk management r	≤ 100 % d duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond	in product d in articles), frequency an nal conditions and measur k that the risk management r litions followed.	≤ 100 % d duration of use/exposure ≤ 8 h/day es	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation cond	in product d in articles), frequency an nal conditions and measur k that the risk management i ditions followed. related to personal protect	≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	90 % (APF 10)
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures	in product d in articles), frequency an nal conditions and measur k that the risk management r litions followed. related to personal protect a minimum efficiency of (%):	≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec correctly and operation conc Conditions and measures Wear a respirator providing	in product d in articles), frequency an nal conditions and measur k that the risk management r litions followed. related to personal protect a minimum efficiency of (%):	≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to checorrectly and operation cond Conditions and measures Wear a respirator providing Other conditions affecting	in product d in articles), frequency an nal conditions and measur k that the risk management r litions followed. related to personal protect a minimum efficiency of (%): workers exposure	≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

2.26. Control of worker exposure: Treatment of arti	cles by dipping and pouring (PROC13)	
PROC13 Treatment of articles by	dipping and pouring	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product ≤ 100 %		
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and mea	sures	
Supervision in place to check that the risk manageme		
correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		× 50.00
Maximum process temperature 2.27. Control of worker exposure: Treatment of arti	also by dinning and nauring (DBOC12)	≤ 56 °C
PROC13 Treatment of articles by		
	y dipping and pouring	
Product (article) characteristics	Liquid	
Physical form of product Concentration of substance in product	Liquid ≤ 100 %	
· ·	144 14	
Amount used (or contained in articles), frequency		
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and mea		
Provide a good standard of general ventilation (not les	ss than 1 to 3 air changes per hour)	00.07
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.		90 %
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 40 °C
2.28. Control of worker exposure: Tabletting, comp		lation (PROC14)
PROC14 Tabletting, compression	n, extrusion, pelettisation, granulation	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	sures	
Provide a good standard of general ventilation (not les Efficiency		30 %
Supervision in place to check that the risk manageme correctly and operation conditions followed.	in measures in place are being used	
Other conditions affecting workers exposure		
Other conditions affecting workers exposure indoor		
		≤ 56 °C
indoor Maximum process temperature	ression, extrusion, pelettisation, granu	
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp	pression, extrusion, pelettisation, granu n, extrusion, pelettisation, granulation	
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp		
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp PROC14 Tabletting, compression		
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp PROC14 Tabletting, compression Product (article) characteristics	n, extrusion, pelettisation, granulation	
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp PROC14 Tabletting, compression Product (article) characteristics Physical form of product	n, extrusion, pelettisation, granulation Liquid ≤ 100 %	
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp PROC14 Tabletting, compression Product (article) characteristics Physical form of product Concentration of substance in product	n, extrusion, pelettisation, granulation Liquid ≤ 100 %	
indoor Maximum process temperature 2.29. Control of worker exposure: Tabletting, comp PROC14 Tabletting, compression Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency	Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day	

08/08/2022 (Revision date) IE - en 103/265

a roophatol bloyldill	g a minimum efficiency of (%):	tion, hygiene and health evaluation	90 %
			(APF 10)
Other conditions affectin	g workers exposure		
ndoor,and/or,Outdoor			
Maximum process tempera	ature		≤ 320 °C
.30. Control of worker ex	posure: Tabletting, compres	ssion, extrusion, pelettisation, gran	ulation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) characte	eristics		
Physical form of product	Liquid		
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
echnical and organisati	onal conditions and measur	es	
		than 3 to 5 air changes per hour).	30 %
Efficiency	` ` `	<u> </u>	00 /0
Supervision in place to che correctly and operation cor		measures in place are being used	
Other conditions affecting			
other conditions affecting	ig workers exposure		
Naximum process tempera	ature		≤ 56 °C
		ssion, extrusion, pelettisation, gran	<u>'</u>
PROC14	-	extrusion, pelettisation, granulation	dianon (FROOT4)
	0, 1	particularity, grandiation	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and measur		
	onai conditions and measur	es	
		es han 1 to 3 air changes per hour)	
Provide a good standard o Local exhaust ventilation -	f general ventilation (not less t efficiency of at least	han 1 to 3 air changes per hour)	90 %
Provide a good standard o Local exhaust ventilation - Supervision in place to che	f general ventilation (not less t efficiency of at least eck that the risk management i		90 %
Provide a good standard o Local exhaust ventilation - Supervision in place to che correctly and operation cor	f general ventilation (not less t efficiency of at least eck that the risk management r nditions followed.	han 1 to 3 air changes per hour)	90 %
Provide a good standard o Local exhaust ventilation - Supervision in place to che correctly and operation cor Other conditions affectin	f general ventilation (not less t efficiency of at least eck that the risk management r nditions followed.	han 1 to 3 air changes per hour)	90 %
Provide a good standard on Local exhaust ventilation - Supervision in place to che correctly and operation corporation corporation corporations affecting indoor	f general ventilation (not less t efficiency of at least eck that the risk management in ditions followed. Ing workers exposure	han 1 to 3 air changes per hour)	
Provide a good standard on Local exhaust ventilation - Supervision in place to che correctly and operation corporations affection and oor Maximum process temperations.	f general ventilation (not less t efficiency of at least eck that the risk management in ditions followed. ag workers exposure	han 1 to 3 air changes per hour) measures in place are being used	90 % ≤ 56 °C
Provide a good standard on Local exhaust ventilation - Supervision in place to che correctly and operation corporation corporations affection and our Maximum process temperations. 32. Control of worker expenses.	f general ventilation (not less to efficiency of at least eck that the risk management in inditions followed. In workers exposure ature	than 1 to 3 air changes per hour) measures in place are being used s (PROC15)	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation corporate conditions affecting and operation corporation corporation motion. Maximum process temperations. 32. Control of worker expressions.	f general ventilation (not less to efficiency of at least eck that the risk management inditions followed. In g workers exposure exposure: Laboratory activitie Use as laboratory reagent	than 1 to 3 air changes per hour) measures in place are being used s (PROC15)	
Provide a good standard on Local exhaust ventilation - Supervision in place to che correctly and operation correctly and operation correctly and operation affection and our Maximum process temperated as a control of worker express temperate	f general ventilation (not less to efficiency of at least eck that the risk management inditions followed. In g workers exposure exposure: Laboratory activitie Use as laboratory reagent	than 1 to 3 air changes per hour) measures in place are being used s (PROC15)	
Provide a good standard on Local exhaust ventilation - Supervision in place to che correctly and operation corporation corporations affecting and operation corporations affecting and operation affecting and a supervision corporation of worker expended. Product (article) character of product form of product	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In workers exposure ature Use as laboratory activities Pristics	than 1 to 3 air changes per hour) measures in place are being used s (PROC15)	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and operation correctly and operation correctly and operations affecting indoor Maximum process temperations. 32. Control of worker expended (article) character (article) character (physical form of product Concentration of substance	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In general ventilation (not less to efficiency of at least management inditions followed. In general ventilation (not less to efficiency of at least management efficiency) I general ventilation (not less to efficiency) I general ven	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 %	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation corporated with the conditions affecting and operation corporated with the conditions affecting and the conditions affecting and the conditions affecting and the conditions affecting and the conditions are control of worker expressed for the conditions affecting and the conditions are conditions affecting and the conditions affecting affecting and the conditions affecting affecting and the conditions affecting affecting affecting affecting and the conditions affecting affectin	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In workers exposure ature Use as laboratory activities Pristics	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and operations affecting indoor Maximum process temperations. 32. Control of worker expressed to the control of worker expressed form of product Concentration of substance concentration c	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In general ventilation (not less to efficiency of at least management inditions followed. In general ventilation (not less to efficiency of at least management efficiency) I general ventilation (not less to efficiency) I general ven	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 %	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and operations affecting indoor Maximum process temperates. 32. Control of worker expended. PROC15 Product (article) character physical form of product Concentration of substance Amount used (or contain Exposure duration	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In general ventilation (not less to efficiency of at least management inditions followed. In general ventilation (not less to efficiency of at least management efficiency) I general ventilation (not less to efficiency) I general ven	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation affection in door Maximum process temperations. 32. Control of worker expressed for a control of worker expressed form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisation of supervision in place to che	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In gworkers exposure atture Use as laboratory activities Use as laboratory reagent eristics e in product and in articles), frequency and conditions and measure eck that the risk management in	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation and or Maximum process temperations. 32. Control of worker expressed for the control of substance of the concentration of the con	f general ventilation (not less to efficiency of at least ext that the risk management inditions followed. In gworkers exposure ature Use as laboratory activitie Use as laboratory reagent eristics e in product led in articles), frequency and conditions and measure ext that the risk management inditions followed.	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and of worker expressed and the supervision of substance and the supervision in place to che correctly and operation corroctler conditions affecting the supervision in place to che correctly and operation corroctler conditions affecting the supervision in place to che correctly and operation corroctler conditions affecting correctler and operation corroctler conditions affecting correctler and operation corroctler conditions affecting correctly and operation corroctler conditions affecting correctler and conditions affecting correctler and correc	f general ventilation (not less to efficiency of at least ext that the risk management inditions followed. In gworkers exposure ature Use as laboratory activitie Use as laboratory reagent eristics e in product led in articles), frequency and conditions and measure ext that the risk management inditions followed.	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and opera	f general ventilation (not less to efficiency of at least eck that the risk management inditions followed. In gworkers exposure ature Dosure: Laboratory activitie Use as laboratory reagent eristics e in product med in articles), frequency and conditions and measure eck that the risk management inditions followed. In gworkers exposure	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and opera	f general ventilation (not less to efficiency of at least efficiency of at least exk that the risk management inditions followed. In gworkers exposure atture Use as laboratory activities Use as laboratory reagent eristics e in product and in articles), frequency and ext that the risk management inditions followed. In gworkers exposure	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and process temperative. 32. Control of worker expressed form of product (article) character Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisati Supervision in place to che correctly and operation correct	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In gworkers exposure ature Use as laboratory activitie Use as laboratory reagent eristics e in product and in articles), frequency and eck that the risk management inditions followed. In gworkers exposure ature posure: Equipment cleaning	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	≤ 56 °C ≤ 56 °C
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and opera	f general ventilation (not less to efficiency of at least existed that the risk management inditions followed. In g workers exposure ature Dosure: Laboratory activitie Use as laboratory reagent eristics Transfer of substance or not substance or not substance or not efficiency and the conditions and measure existed that the risk management inditions followed.	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used	≤ 56 °C ≤ 56 °C
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and opera	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In gworkers exposure atture Use as laboratory activities Use as laboratory reagent eristics e in product and in articles), frequency and eck that the risk management inditions followed. In gworkers exposure atture atture prosure: Equipment cleaning Transfer of substance or in Manual maintenance (cleaning)	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used g and maintenance (PROC8a, PROC nixture (charging and discharging) at the second of the second	≤ 56 °C ≤ 56 °C
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation correctly and process temperatives. 32. Control of worker expressed form of product Concentration of substance Con	f general ventilation (not less to efficiency of at least efficiency of at least eck that the risk management inditions followed. In gworkers exposure atture Use as laboratory activities Use as laboratory reagent eristics e in product and in articles), frequency and eck that the risk management inditions followed. In gworkers exposure atture prosure: Equipment cleaning Transfer of substance or in Manual maintenance (cleaning)	than 1 to 3 air changes per hour) measures in place are being used s (PROC15) Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es measures in place are being used g and maintenance (PROC8a, PROC nixture (charging and discharging) at the second of the second	≤ 56 °C ≤ 56 °C

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Concentration of substance in			
	n product	≤ 100 %	
Amount used (or contained	l in articles), frequency an	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measur	res	
~		measures in place are being used	
correctly and operation condi			
		tion, hygiene and health evaluation	
Wear a respirator providing a	minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		,
indoor,and/or,Outdoor	•		
Maximum process temperatu	ire		≤ 56 °C
2.34. Control of worker expo	sure: Equipment cleaning	g and maintenance (PROC8a, PROC	28)
PROC8a	Transfer of substance or r	nixture (charging and discharging) at r	non-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	l in articles), frequency an	nd duration of use/exposure	
Exposure duration	,	≤ 8 h/day	
Technical and organisation	al conditions and measur	,	
		than 3 to 5 air changes per hour).	30 %
Efficiency	cheral vertiliation (not less	man 5 to 5 an enanges per nour).	30 70
Supervision in place to check correctly and operation condi		measures in place are being used	
Other conditions affecting			
indoor	workers exposure		
Maximum process temperatu	IΓΩ		≤ 56 °C
		g and maintenance (PROC8a, PROC	
PROC8a		nixture (charging and discharging) at r	
PROC28		aning and repair) of machinery	
		• ' '	
Product (article) characteris	etice		
Product (article) characteris	stics	Liquid	
Physical form of product		Liquid ≤ 100 %	
Physical form of product Concentration of substance in	n product	≤ 100 %	
Physical form of product Concentration of substance in Amount used (or contained	n product	≤ 100 %	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration	n product I in articles), frequency ar	≤ 100 % ad duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation	n product I in articles), frequency an nal conditions and measur	≤ 100 % ad duration of use/exposure ≤ 8 h/day res	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation	n product I in articles), frequency and all conditions and measures that the risk management	≤ 100 % ad duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check	n product I in articles), frequency and all conditions and measure that the risk management tions followed.	≤ 100 % ad duration of use/exposure ≤ 8 h/day res	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi	n product I in articles), frequency and all conditions and measure that the risk management tions followed.	≤ 100 % ad duration of use/exposure ≤ 8 h/day res	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting	n product I in articles), frequency and all conditions and measure that the risk management tions followed. workers exposure	≤ 100 % ad duration of use/exposure ≤ 8 h/day res	≤ 56 °C
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperature	n product I in articles), frequency and all conditions and measure that the risk management tions followed. workers exposure	≤ 100 % ad duration of use/exposure ≤ 8 h/day res	
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperature	n product I in articles), frequency and lactions and measure that the risk management tions followed. workers exposure	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo	n product I in articles), frequency and in articles), frequency and in articles and measure at that the risk management tions followed. workers exposure psure: Equipment cleaning Transfer of substance or r	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used g and maintenance (PROC8a, PROC	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperature 2.36. Control of worker expor	n product d in articles), frequency and lead conditions and measure that the risk management tions followed. workers exposure psure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning)	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used g and maintenance (PROC8a, PROC mixture (charging and discharging) at reserved.	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo	n product d in articles), frequency and lead conditions and measure that the risk management tions followed. workers exposure psure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning)	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used g and maintenance (PROC8a, PROC mixture (charging and discharging) at reserved.	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo PROC8a PROC28 Product (article) characteris	n product I in articles), frequency and in articles), frequency and in articles and measure at that the risk management tions followed. workers exposure are psure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning)	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used g and maintenance (PROC8a, PROC mixture (charging and discharging) at reaning and repair) of machinery	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo PROC8a PROC28 Product (article) characteric Physical form of product Concentration of substance in	n product d in articles), frequency and lal conditions and measure that the risk management tions followed. workers exposure are bsure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning) stics	≤ 100 % ad duration of use/exposure ≤ 8 h/day res measures in place are being used g and maintenance (PROC8a, PROC mixture (charging and discharging) at reaning and repair) of machinery Liquid ≤ 100 %	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo PROC8a PROC28 Product (article) characteris Physical form of product Concentration of substance in	n product d in articles), frequency and lal conditions and measure that the risk management tions followed. workers exposure are bsure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning) stics	≤ 100 % Indicate the description of the descripti	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting o outdoor Maximum process temperatu 2.36. Control of worker expo PROC8a PROC28 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration	n product I in articles), frequency and in articles), frequency and in articles and measure at that the risk management tions followed. workers exposure ore osure: Equipment cleaning Transfer of substance or r Manual maintenance (cleaning) stics n product I in articles), frequency are	≤ 100 % Indicate the state of	28)
Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Other conditions affecting outdoor Maximum process temperatu 2.36. Control of worker expo PROC8a PROC28 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation	In product If in articles), frequency and in articles), frequency and in all conditions and measure that the risk management tions followed. Workers exposure Transfer of substance or manual maintenance (cleaning stics) In product If in articles), frequency and in articles), frequency and in all conditions and measures.	≤ 100 % Indicate the state of	28)

105/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	
Other conditions affecting workers exposure	
indoor	
Maximum process temperature	≤ 56 °C

8.3. Exposure estimation and reference to its source

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m ³ /d		
Release fraction to wastewater	1 %	ESVOC SPERC 4.20.v1
Release to waste water from process	900 kg/day	ESVOC SPERC 4.20.v1
Release fraction to air from process	0.2 %	ESVOC SPERC 4.20.v1
Release to air from process	180 kg/day	ESVOC SPERC 4.20.v1
Release fraction to soil from process	0.01 %	ESVOC SPERC 4.20.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	6.352	10.6	0.599	EUSES v2.1.2
Marine water	mg/l	0.63	1.06	0.594	EUSES v2.1.2
Freshwater sediment	mg/kg	27.86	30.4	0.916	EUSES v2.1.2
Marine water sediment	mg/kg	2.764	3.04	0.909	EUSES v2.1.2
Sewage treatment plant	mg/l	56.04	100	0.56	EUSES v2.1.2
Soil	mg/kg	0.847	29.5	0.029	EUSES v2.1.2

8.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

8.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker

8.3.4. Worker exposure Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

8.3.5. Worker exposure Chemical production where opportunity for exposure arises (PROC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 106/265

Sum RCR - Long-term - systemic effects		0.237	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
8.3.6. Worker exposure Mixing op	erations (open systems) (PROC5)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
8.3.7. Worker exposure Mixing op			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424 0.698	ECETOC TRA worker
8.3.8. Worker exposure Mixing op		0.000	EGETOO TIVA WOIKEI
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	60.5 mg/m³	0.05 0.057	ECETOC TRA Worker
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
8.3.9. Worker exposure Mixing op			EGET GO THAT WORKER
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects Inhalation - Long-term -	13.71 mg/kg bw/day 423.5 mg/m³	0.074	ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term -	423.3 Hig/III	0.424	LOCITO TITA WOING!
systemic effects			
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.197	ECETOC TRA worker
	ring (including Banburys) (PROC6)	<u> </u>	LOCATION HOROI
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
8.3.12. Worker exposure Calender	ring (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	, ,	,,	
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.13. Worker exposure Calende	ring (including Banburys) (PRO	C6)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.743 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.065	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.14. Worker exposure Transfer	of substance or mixture (chargi	ng and discharging) at non-dedic	cated facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker
		ng and discharging) at non-dedic	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker
	·	ng and discharging) at non-dedic	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	F0FT00 TD4
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	ng and discharging) at non-dedic	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation			
	242 mg/m³	0.1	ECETOC TRA worker
18. Worker exposure Transfer		0.1 ng and discharging) at dedicated	
Route of exposure and type		1 -	
Route of exposure and type of effects Dermal - Long-term - systemic	of substance or mixture (chargi	ng and discharging) at dedicated	facilities (PROC8b)
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	of substance or mixture (chargi Exposure estimate	ng and discharging) at dedicated RCR 0.074 0.3	facilities (PROC8b) Method
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	of substance or mixture (chargi Exposure estimate 13.71 mg/kg bw/day	ng and discharging) at dedicated RCR 0.074	Method ECETOC TRA worker

08/08/2022 (Revision date) IE - en 108/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

<u>'</u>		Il containers (dedicated filling line, in	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic offects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
nhalation - Long-term - systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
	oplication or brushing (PROC10)	200	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1000	0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·	oplication or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·	oplication or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040	0.197	FORTOO TO A
Acute - Local - Inhalation	242 mg/m³ oplication or brushing (PROC10)	0.1	ECETOC TRA worker
		1.505	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.24. Worker exposure Treatme Route of exposure and type of effects	nt of articles by dipping and pour Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	nt of articles by dipping and pouri	ng (PROC13)	
.25. Worker exposure Treatme			
.25. Worker exposure Treatme Route of exposure and type of effects	Exposure estimate	RCR	Method
Route of exposure and type	Exposure estimate 13.71 mg/kg bw/day	0.074	ECETOC TRA worker

Sum RCR - Long-term -		0.124	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
8.3.26. Worker exposure Treatment	nt of articles by dipping and pouring	(PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
8.3.27. Worker exposure Treatme	nt of articles by dipping and pouring	g (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	g, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000	0.368	ECETOC TDAdica
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	g, compression, extrusion, pelettisa	```	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	ng, compression, extrusion, pelettisa		EGET GOTT THA WORKET
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.368	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	g, compression, extrusion, pelettis		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.343 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.052	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
8.3.32. Worker exposure Laborato			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.102	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
.33. Worker exposure Equipme			202100 1101 1101101
Route of exposure and type	Exposure estimate	RCR	Method
of effects	·		
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.34. Worker exposure Equipme	ent cleaning and maintenance	e (PROC8a, PROC28)	
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.35. Worker exposure Equipme	ent cleaning and maintenance	(PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.36. Worker exposure Equipme	ent cleaning and maintenance	e (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
	242 mg/m³	0.1	ECETOC TRA worker
		ether he works inside t	he boundaries set by the ES
.1. Environment			
Guidance - Environment Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures			
	Scaling may be necessa	ary to define appropriate site-sp	noome nak management measures
.2. Health			
Guidance - Health No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.			

08/08/2022 (Revision date) IE - en 111/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

9. AC SE09: Use in polymer processing

Use in polymer processing		ES Ref.: AC SE09 ES Type: Worker	Association ref code: IS	
Environment				
CS 1	Use in polymer processing	ERC6d	ERC6d	
Worker				
	Worker Contributing Scenario	PROC6,	PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC13, PROC14, PROC15,	

9.2. Conditions of use affecting exposure

9.2.1. Control of environmental exposure: Use in polymer processing (ERC6d)

ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)

Amount used, frequency and duration of use (or from service life)

Daily amount per site \leq 109.2 t/d Annual site tonnage (tons/year): \leq 32760 t/yr

Conditions and measures related to sewage treatment plant

Assumed domestic sewage treatment plant flow ≥ 2000 m³/d

Sludge treatment technique : Controlled application to agricultural soil

Conditions and measures related to treatment of waste (including article waste)

Dispose of waste in accordance with environmental legislation

9.2.2. Control of worker exposure: Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
PROC14	Tabletting, compression, extrusion, pelettisation, granulation
PROC15	Use as laboratory reagent
PROC28	Manual maintenance (cleaning and repair) of machinery

9.3. Exposure estimation and reference to its source

9.3.1. Environmental release and exposure Use in polymer processing (ERC6d)

Release route		Release rate		Release	estimation method	
Receiving surface water flow is 18000 m³/d						
Release fraction to wastewater		0 %		ESVOC	ESVOC SPERC 4.21a.v1	
Release to waste water from p	process	0 kg/day		ESVOC	SPERC 4.21a.v1	
Release fraction to air from pro	ocess	15 %		ESVOC	SPERC 4.21a.v1	
Release to air from process		16400 kg/day		ESVOC	SPERC 4.21a.v1	
Release fraction to soil from p	rocess	0.001 %		ESVOC	SPERC 4.21a.v1	
Protection target U	nit Exnosi	Ire	PNFC	RCR	Assessment method	

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.748	10.6	0.071	EUSES v2.1.2

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Marine water	mg/I	0.07	1.06	0.066	EUSES v2.1.2
Freshwater sediment	mg/kg	3.281	30.4	0.108	EUSES v2.1.2
Marine water sediment	mg/kg	0.306	3.04	0.101	EUSES v2.1.2
Sewage treatment plant	mg/l	0	100	0	EUSES v2.1.2
Soil	mg/kg	0.472	29.5	0.016	EUSES v2.1.2

9.3.2. Worker exposure Worker Contributing Scenario (PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC28)

Information for contributing exposure scenario

See exposure scenario nr AC SE08

9.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES				
9.4.1. Environment				
Guidance - Environment	Guidance is based on assumed operating conditions which may not be applicable to all sites; thus, scaling may be necessary to define appropriate site-specific risk management measures			
9.4.2. Health				
Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.			

08/08/2022 (Revision date) IE - en 113/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

10. AC SE10: Use in Cleaning Agents

0.1. Title section				
Use in Cleaning Agents		ES Ref.: A		Association ref code: IS
		ES Type:	Worker	
Environment				
CS 1	Use in Cleaning Agents		ERC4	
Worker				
CS 2	Chemical production or refinery likelihood of exposure or proces containment conditions		PROC1	
CS 3	Chemical production or refinery process with occasional controllwith equivalent containment con	ed exposure or processes	PROC2	
CS 4	Use in closed batch process (sy With occasional controlled expos		PROC3	
CS 5	Chemical production where opporarises	ortunity for exposure	PROC4	
CS 6	Mixing operations (open system	s)	PROC5	
CS 7	Mixing operations (open system	s)	PROC5	
CS 8	Mixing operations (open system	s)	PROC5	
CS 9	Mixing operations (open system	s)	PROC5	
CS 10	Industrial spraying		PROC7	
CS 11	Industrial spraying		PROC7	
CS 12	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 13	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 14	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 15	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 16	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 17	Transfer of substance or mixture (dedicated filling line, including v		PROC9	
CS 18	Roller application or brushing		PROC10	
CS 19	Roller application or brushing		PROC10	
CS 20	Roller application or brushing		PROC10	
CS 21	Roller application or brushing		PROC10	
CS 22	Treatment of articles by dipping	and pouring	PROC13	
CS 23	Treatment of articles by dipping	and pouring	PROC13	
CS 24	Treatment of articles by dipping	and pouring	PROC13	
CS 25	Treatment of articles by dipping	and pouring	PROC13	
CS 26	Laboratory activities		PROC15	
CS 27	Manual activities involving hand contact		PROC19	
CS 28	Manual activities involving hand	contact	PROC19	
CS 29	Manual activities involving hand	contact	PROC19	
CS 30	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 31	Equipment cleaning and mainter		PROC8a, PROC28	
CS 32	Equipment cleaning and mainter		PROC8a, PROC28	
CS 33	Equipment cleaning and mainter		PROC8a, PROC28	
Processes, tasks, activities covered			1	

10.2. Conditions of use affecting exposure

exposure: Use in Cleaning Agents (ERC4)

ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Amount used, frequency and duration of use (or from service life)

Daily amount per site ≤ 109.2 t/d

08/08/2022 (Revision date) IE - en 114/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Annual site tonnage (tons/year):	≤ 32760 t/yr	
Conditions and measures related to sewage trea		
Assumed domestic sewage treatment plant flow	≥ 2000 m³/d	
Sludge treatment technique :	Controlled application to agricultura	l soil
Conditions and measures related to treatment of	waste (including article waste)	
Dispose of waste in accordance with environmental legislation		
10.2.2. Control of worker exposure: Chemical produce equivalent containment conditions (PROC1)	uction or refinery in closed process with	nout likelihood of exposure or processes with
		ood of exposure or processes with equivalent
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequence	ev and duration of use/exposure	
Exposure duration	≤ 8 h/day	
	· ·	
Technical and organisational conditions and me Chemical production or refinery in closed process w with equivalent containment conditions		
Supervision in place to check that the risk manager correctly and operation conditions followed.	nent measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 60 °C
10.2.3. Control of worker exposure: Chemical produ		process with occasional controlled exposure or
processes with equivalent containment conditions	<u>`</u>	
PROC2 Chemical production with equivalent contain		ith occasional controlled exposure or processes
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequence	y and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and me	asures	
Chemical production or refinery in closed continuous exposure or processes with equivalent containment Supervision in place to check that the risk managem	conditions	
correctly and operation conditions followed. Other conditions affecting workers exposure	ion measures in place are being used	
indoor,and/or,outdoor		
Maximum process temperature		≤ 60 °C
10.2.4. Control of worker exposure: Use in closed b	patch process (synthesis or formulation	
(PROC3)		,, mai cocacional controllea expodute
	lation in the chemical industry in closed ba vivalent containment condition	atch processes with occasional controlled exposure
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequence Exposure duration	ey and duration of use/exposure ≤ 8 h/day	
•	,	
Technical and organisational conditions and me Use in closed batch process (synthesis or formulation		
. , ,	on, with occasional controlled exposure	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		400.00
Maximum process temperature		≤ 60 °C
08/08/2022 (Revision date)	IE - en	115/265

08/08/2022 (Revision date) IE - en 115/265

2.5. Control of worker expo	sure: Chemical production	on where opportunity for exposure a	rises (PROC4)
PROC4	Chemical production when	e opportunity for exposure arises	
Product (article) characteri	stics		
Physical form of product	31103	Liquid	
Concentration of substance in product ≤ 100 %			
	•		
	l in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation			
Supervision in place to check correctly and operation condi		measures in place are being used	
Other conditions affecting			
indoor,and/or,Outdoor	workers exposure		
	uro.		≤ 60 °C
Maximum process temperatu 2.6. Control of worker expo		onen systems) (PROCE)	3 00 C
PROC5	<u> </u>		
	Mixing or blending in batch	1 processes	
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	l in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	es	
	that the risk management	measures in place are being used	
		tion, hygiene and health evaluation	
Wear a respirator providing a			90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor	•		
Maximum process temperatu	ire		≤ 60 °C
2.7. Control of worker expo	sure: Mixing operations (open systems) (PROC5)	
PROC5	Mixing or blending in batcl	h processes	
Product (article) characteris	etice		
Physical form of product	31103	Liquid	
Concentration of substance in	n product	≤ 100 %	
	•		
·	l in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measur	es	
Provide a good standard of g Efficiency	eneral ventilation (not less	than 3 to 5 air changes per hour).	30 %
Supervision in place to check correctly and operation condi		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ire		≤ 60 °C
	osure: Mixing operations (open systems) (PROC5)	
2.8. Control of worker expo		n processes	
	Mixing or blending in batch		
2.8. Control of worker expo			
2.8. Control of worker exportant PROC5 Product (article) characterists		Liquid	
2.8. Control of worker expo	stics	Liquid ≤ 100 %	
2.8. Control of worker expo PROC5 Product (article) characterist Physical form of product Concentration of substance in	stics n product	≤ 100 %	
2.8. Control of worker exportance PROC5 Product (article) characterist Physical form of product Concentration of substance in Amount used (or contained	stics n product	≤ 100 % d duration of use/exposure	
2.8. Control of worker expo PROC5 Product (article) characterist Physical form of product Concentration of substance in	stics n product I in articles), frequency an	≤ 100 % d duration of use/exposure ≤ 8 h/day	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid	Substance type: Mono-constituent	
Local exhaust ventilation - efficiency of at least		90 %
Supervision in place to check that the risk management m correctly and operation conditions followed.	neasures in place are being used	00 /0
Other conditions affecting workers exposure		
indoor		
Maximum process temperature	≤ 60 °C	
10.2.9. Control of worker exposure: Mixing operations (o	ppen systems) (PROC5)	
PROC5 Mixing or blending in batch	processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product		
	≤ 100 %	
Amount used (or contained in articles), frequency and	•	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure Supervision in place to check that the risk management measure correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 320 °C
10.2.10. Control of worker exposure: Industrial spraying	(PROC7)	
PROC7 Industrial spraying		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
·		
Amount used (or contained in articles), frequency and		
Exposure duration ≤ 8 h/day		
Moderate application rate (0.3 - 3 l/minute)		
Technical and organisational conditions and measure		
Surface spraying of liquids. Spraying with no or low comp		
Ensure that direction of application is only horizontal or do		
Supervision in place to check that the risk management m correctly and operation conditions followed.	<u> </u>	
Conditions and measures related to personal protecti	on, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):		90 % (APF 10)
Wear gloves providing a minimum efficiency of (%):		80 %
Other conditions affecting workers exposure		(EN 374)
Indoors, Assumes large workrooms, and/or, Outdoors, close	e to buildings (< 4 m)	
Maximum process temperature		≤ 60 °C
10.2.11. Control of worker exposure: Industrial spraying	(PROC7)	
PROC7 Industrial spraying		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
•		
Amount used (or contained in articles), frequency and	•	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minute)		
Technical and organisational conditions and measure		
Provide a good standard of general ventilation (not less the	nan 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least Surface spraying of liquids. Spraying with no or low comp	ressed air use	95 %
Ensure that direction of application is only horizontal or do		
Supervision in place to check that the risk management m correctly and operation conditions followed.		
08/08/2022 (Revision date)	IE - en	117/265

	workers exposure		
Indoors, Assumes large work	rooms		
Maximum process temperatu	ıre		≤ 60 °C
2.12. Control of worker exp	oosure: Transfer of substa	nce or mixture (charging and discha	ging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at no	n-dedicated facilities
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
	•		
	a in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	res	
Efficiency Supervision in place to check	k that the risk management r	than 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation condi			
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu			≤ 60 °C
	1	· · · · · · · · · · · · · · · · · · ·	ging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at no	n-dedicated facilities
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance is	n product	≤ 100 %	
Amount used (or contained	d in articles) frequency an	d duration of use/exposure	
Exposure duration	a m artiology, moquency an	≤ 8 h/day	
·		,	
Technical and organisation			
· · · · · · · · · · · · · · · · · · ·	general ventilation (not less t	than 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to check	k that the risk management r	measures in place are being used	
correctly and operation condi		, , ,	
Other conditions affecting	workers exposure		
Other conditions affecting indoor	workers exposure		
	•		≤ 60 °C
indoor Maximum process temperatu	ıre	nce or mixture (charging and discha	≤ 60 °C rging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu	ure posure: Transfer of substa	nce or mixture (charging and dischar	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu 2.14. Control of worker exp PROC8a	oosure: Transfer of substa Transfer of substance or n		ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp PROC8a Product (article) characteri	oosure: Transfer of substa Transfer of substance or n	nixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp PROC8a Product (article) characteri Physical form of product	oosure: Transfer of substa Transfer of substance or n	nixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp PROC8a Product (article) characteri	oosure: Transfer of substa Transfer of substance or n	nixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance i	oosure: Transfer of substa Transfer of substance or nistics	nixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance i	oosure: Transfer of substa Transfer of substance or nistics	nixture (charging and discharging) at no Liquid ≤ 100 %	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp PROC8a Product (article) characteri Physical form of product Concentration of substance ii Amount used (or contained	Transfer of substate or no strice n product d in articles), frequency an	nixture (charging and discharging) at no Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance i Amount used (or contained Exposure duration Technical and organisation	Transfer of substance or no strics n product d in articles), frequency and conditions and measures that the risk management is	nixture (charging and discharging) at no Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance is Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi	Transfer of substance or n sistics n product d in articles), frequency and conditions and measures that the risk management ritions followed.	nixture (charging and discharging) at no Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance ii Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Conditions and measures if Wear a respirator providing a	Transfer of substance or no stics n product d in articles), frequency and that the risk management ritions followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Liquid side duration of use/exposure	ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance ii Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Conditions and measures if Wear a respirator providing a	Transfer of substance or no stics n product d in articles), frequency and that the risk management ritions followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Liquid side duration of use/exposure	rging) at non-dedicated facilities (PROC8a) n-dedicated facilities
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance ii Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Conditions and measures if Wear a respirator providing a	Transfer of substance or no stics n product d in articles), frequency and that the risk management ritions followed. related to personal protect a minimum efficiency of (%):	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Liquid side duration of use/exposure	rging) at non-dedicated facilities (PROC8a) n-dedicated facilities
indoor Maximum process temperature. 2.14. Control of worker expended. PROC8a Product (article) charactericterictericterictericterictericteri	Transfer of substance or noistics In product In articles, frequency and that the risk management ritions followed. In articles of the management of the ma	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Liquid side duration of use/exposure	rging) at non-dedicated facilities (PROC8a) n-dedicated facilities
indoor Maximum process temperature. 2.14. Control of worker experiors. PROC8a Product (article) characteriors. Physical form of product. Concentration of substance in the concentration. Technical and organisation. Supervision in place to check correctly and operation conditions and measures in the conditions and measures in the conditions affecting indoor, and/or, Outdoor. Maximum process temperature.	Transfer of substance or noistics n product d in articles), frequency and all conditions and measure at that the risk management ritions followed. related to personal protect a minimum efficiency of (%): workers exposure	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities 90 % (APF 10)
indoor Maximum process temperature. 2.14. Control of worker experiors. PROC8a Product (article) charactericterictericterictericterictericteri	Transfer of substance or notices In product In articles, frequency and that the risk management ritions followed. In articles of (%): Workers exposure	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities 90 % (APF 10) ≤ 320 °C ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance i Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation condi Conditions and measures i Wear a respirator providing a Other conditions affecting indoor,and/or,Outdoor Maximum process temperatu. 2.15. Control of worker exp.	Transfer of substance or no strics In product din articles), frequency and that the risk management related to personal protect a minimum efficiency of (%): workers exposure Transfer of substance or no s	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Ses Measures in place are being used tion, hygiene and health evaluation	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities 90 % (APF 10) ≤ 320 °C ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperature. 2.14. Control of worker expended and product (article) characterical physical form of product Concentration of substance in the concentration of the contained and organisation. Technical and organisation supervision in place to check correctly and operation conditions and measures in the conditions and measures in the conditions affecting indoor, and/or, Outdoor Maximum process temperature. 2.15. Control of worker expended and product (article) characterical p	Transfer of substance or no strics In product din articles), frequency and that the risk management related to personal protect a minimum efficiency of (%): workers exposure Transfer of substance or no s	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day res measures in place are being used tion, hygiene and health evaluation make or mixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities 90 % (APF 10) ≤ 320 °C ging) at non-dedicated facilities (PROC8a)
indoor Maximum process temperatu. 2.14. Control of worker exp. PROC8a Product (article) characteri Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Supervision in place to check correctly and operation conditions and measures in Wear a respirator providing an Other conditions affecting indoor, and/or, Outdoor Maximum process temperatu. 2.15. Control of worker exp.	Transfer of substance or notices In product In articles, frequency and all conditions and measures that the risk management ritions followed. In articles of the management	Liquid ≤ 100 % Id duration of use/exposure ≤ 8 h/day Ses Measures in place are being used tion, hygiene and health evaluation	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities 90 % (APF 10) ≤ 320 °C ging) at non-dedicated facilities (PROC8a)

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained in articles), freque	ency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	measures	
Provide a good standard of general ventilation (n		
Local exhaust ventilation - efficiency of at least	90 %	
Supervision in place to check that the risk manage correctly and operation conditions followed.	gement measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 60 °C
2.16. Control of worker exposure: Transfer of	f substance or mixture (charging and disch	arging) at dedicated facilities (PROC8b)
PROC8b Transfer of substa	ance or mixture (charging and discharging) at d	edicated facilities
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), freque	ency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	measures	
Supervision in place to check that the risk manage correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 60 °C
Maximum process temperature		
2.17. Control of worker exposure: Transfer of	f substance or mixture into small container	s (dedicated filling line, including weighing)
.2.17. Control of worker exposure: Transfer of ROC9)		
.2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa	f substance or mixture into small container	
.2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics	ance or preparation into small containers (dedic	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product	ance or preparation into small containers (dedic	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product	ance or preparation into small containers (dedic	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substate Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency	Liquid ≤ 100 % ency and duration of use/exposure	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product o	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency from the contained in articles of the contained	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequently frequently form of product in articles in product. Technical and organisational conditions and supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the substance in product Exposure duration Technical and organisational conditions and supervision in place to check that the risk manageorrectly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller apple PROC10	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 %	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency of the product of	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure	cated filling line, including weighing)
2.17. Control of worker exposure: Transfer of ROC9) PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller apple PROC10 Roller application of Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency free product and organisational conditions and Supervision in place to check that the risk manage substance	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures	cated filling line, including weighing)
PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and correctly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller applementation of product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency from the product of the pro	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller appl PROC10 Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency for the product of the pro	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)
PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller appl PROC10 Roller application of Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency for the product of th	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used lication or brushing (PROC10) or brushing Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing) ≤ 60 °C
PROC9 Transfer of substa Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and supervision in place to check that the risk manage correctly and operation conditions followed. Other conditions affecting workers exposure indoor, and/or, outdoor Maximum process temperature 2.18. Control of worker exposure: Roller appl PROC10 Roller application of Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency for the product of th	Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used Liquid ≤ 100 % Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures gement measures in place are being used	cated filling line, including weighing)

08/08/2022 (Revision date) IE - en 119/265

Product (article) characteristics			
Physical form of product	Liquid		
Concentration of substance in product	≤ 100 %		
Amount used (or contained in articles), frequency	and duration of use/exposure		
Exposure duration	≤ 8 h/day		
Technical and organisational conditions and meas	sures		
-	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).		
Efficiency			
Supervision in place to check that the risk management correctly and operation conditions followed.	nt measures in place are being used		
Other conditions affecting workers exposure			
Indoor			
Maximum process temperature		≤ 60 °C	
0.2.20. Control of worker exposure: Roller application	on or brushing (PROC10)		
PROC10 Roller application or bru	shing		
Product (article) characteristics			
Physical form of product	Liquid		
Concentration of substance in product	≤ 100 %		
Amount used (or contained in articles), frequency	and duration of use/exposure		
Exposure duration	≤ 8 h/day		
Technical and organisational conditions and meas	,		
Supervision in place to check that the risk management			
correctly and operation conditions followed.	it measures in place are being used		
Conditions and measures related to personal prote	ection, hygiene and health evaluation		
Wear a respirator providing a minimum efficiency of (%	6):	90 % (APF 10)	
Other conditions affecting workers exposure		(ALT 10)	
Indoor,and/or,outdoor			
Maximum process temperature		≤ 60 °C	
0.2.21. Control of worker exposure: Roller application	on or brushing (PROC10)		
PROC10 Roller application or bru	shing		
Product (article) characteristics			
Physical form of product	Liquid		
Concentration of substance in product	≤ 100 %		
Amount used (or contained in articles), frequency	and duration of use/exposure		
Exposure duration	≤ 8 h/day		
·	•		
Technical and organisational conditions and meas			
Provide a good standard of general ventilation (not les	s than 1 to 3 air changes per nour)	00.9/	
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management	nt measures in place are being used	90 %	
correctly and operation conditions followed.	, ,		
Other conditions affecting workers exposure			
indoor			
Maximum process temperature		≤ 60 °C	
0.2.22. Control of worker exposure: Treatment of art			
PROC13 Treatment of articles by	dipping and pouring		
Product (article) characteristics			
D			
Physical form of product	Liquid		
Physical form of product Concentration of substance in product	Liquid ≤ 100 %		
·	· ≤ 100 %		
Concentration of substance in product	· ≤ 100 %		
Concentration of substance in product Amount used (or contained in articles), frequency	≤ 100 % and duration of use/exposure ≤ 8 h/day		
Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration	≤ 100 % and duration of use/exposure ≤ 8 h/day sures	30 %	
Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and measurements	≤ 100 % and duration of use/exposure ≤ 8 h/day sures	30 %	
Concentration of substance in product Amount used (or contained in articles), frequency Exposure duration Technical and organisational conditions and measure and provide a good standard of general ventilation (not less	≤ 100 % and duration of use/exposure ≤ 8 h/day sures		20/265

correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 60 °C
10.2.23. Control of worker exposure: Treatment of artic	les by dipping and pouring (PROC13	
PROC13 Treatment of articles by di	ipping and pouring	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
·		
Amount used (or contained in articles), frequency an	•	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur		
Supervision in place to check that the risk management correctly and operation conditions followed.	<u> </u>	
Conditions and measures related to personal protect		
Wear a respirator providing a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 60 °C
10.2.24. Control of worker exposure: Treatment of article	les by dipping and pouring (PROC13)
PROC13 Treatment of articles by di	ipping and pouring	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	nd duration of use/exposure	
Exposure duration	• ≤ 8 h/day	
Technical and organisational conditions and measur	· ·	
Supervision in place to check that the risk management correctly and operation conditions followed.		
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 60 °C
10.2.25. Control of worker exposure: Treatment of articl	les by dipping and pouring (PROC13	
PROC13 Treatment of articles by di	ipping and pouring	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
<u>'</u>		
Amount used (or contained in articles), frequency an Exposure duration	≤ 8 h/day	
	·	
Technical and organisational conditions and measur		
Provide a good standard of general ventilation (not less to	than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	90 %
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 60 °C
10.2.26. Control of worker exposure: Laboratory activiti	ies (PROC15)	
PROC15 Use as laboratory reagent	t	
Product (article) characteristics		
Physical form of product	Liquid	
	<u> </u>	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Supervision in place to check that the risk management r correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 60 °C
.2.27. Control of worker exposure: Manual activities in	nvolving hand contact (PROC19)	
PROC19 Manual activities involving	hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	· ≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
·	,	
Technical and organisational conditions and measure		
Supervision in place to check that the risk management r correctly and operation conditions followed.	measures in place are being used	
Conditions and measures related to personal protect	ion hygiene and health evaluation	
Wear gloves providing a minimum efficiency of (%):	ion, nygiene and nearth evaluation	80 %
Troat gloves providing a minimum emoleticy of (70).		(EN 374)
Other conditions affecting workers exposure		
outdoor		
Maximum process temperature		≤ 60 °C
.2.28. Control of worker exposure: Manual activities in	nvolving hand contact (PROC19)	
PROC19 Manual activities involving	hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
·		
Amount used (or contained in articles), frequency an	•	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure		
Provide a good standard of general ventilation (not less t	han 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		
Supervision in place to check that the risk management r correctly and operation conditions followed.	measures in place are being used	90 %
Supervision in place to check that the risk management r	,	90 %
Supervision in place to check that the risk management r correctly and operation conditions followed.	,	90 % 80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect	,	80 %
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%):	,	80 %
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure	,	80 %
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor	ion, hygiene and health evaluation	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature	nvolving hand contact (PROC19)	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in	nvolving hand contact (PROC19)	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving	nvolving hand contact (PROC19)	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics	nvolving hand contact (PROC19)	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product	nvolving hand contact (PROC19) hand contact Liquid ≤ 100 %	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency an	nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency an Exposure duration	nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	80 % (EN 374)
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature .2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency an Exposure duration Technical and organisational conditions and measure	ion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	80 % (EN 374) ≤ 60 °C
Supervision in place to check that the risk management recorrectly and operation conditions followed. Conditions and measures related to personal protect Wear gloves providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor Maximum process temperature 2.29. Control of worker exposure: Manual activities in PROC19 Manual activities involving Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency an Exposure duration	ion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	80 % (EN 374)

08/08/2022 (Revision date) IE - en 122/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

		neasures in place are being used	
correctly and operation cond			
	· · · · · · · · · · · · · · · · · · ·	ion, hygiene and health evaluation	
Wear gloves providing a mir	nimum efficiency of (%):		80 % (EN 374)
Other conditions affecting	workers exposure		
indoor			
Maximum process temperat	ure		≤ 60 °C
2.30. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at n	non-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	· ≤ 100 %	
Amount used (or contains	ed in articles), frequency an	d duration of use/exposure	
Exposure duration	a in articles), frequency and	≤ 8 h/day	
•		,	
	nal conditions and measure		
Provide a good standard of Efficiency	general ventilation (not less the	han 3 to 5 air changes per hour).	30 %
		neasures in place are being used	
Other conditions affecting			
indoor			
Maximum process temperat	ure		≤ 60 °C
2.31. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a		nixture (charging and discharging) at n	<u>'</u>
PROC28		ning and repair) of machinery	
	,	3	
Product (article) character	istics	I i anni al	
Physical form of product	in neaduat	Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency and	·	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measure	es	
Supervision in place to chec correctly and operation cond		neasures in place are being used	
Conditions and measures	related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%):		90 %
			(APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperat	ure		≤ 60 °C
2.32. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Dhysical form of product		Liquid	
Physical form of product	in product	≤ 100 %	
<u>'</u>		d duration of use/exposure	
Concentration of substance	d in articles) frequency an		
Concentration of substance Amount used (or containe	ed in articles), frequency an	·	
Concentration of substance Amount used (or containe Exposure duration	,, , ,	≤ 8 h/day	
Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	nal conditions and measure	≤ 8 h/day es	
Exposure duration Technical and organisatio	nal conditions and measure	≤ 8 h/day	
Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Supervision in place to chec	nal conditions and measure ok that the risk management r ditions followed.	≤ 8 h/day es	

08/08/2022 (Revision date) IE - en 123/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Maximum process temperature		≤ 60 °C	
0.2.33. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC			28)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at no	n-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration ≤ 8 h/day			
Technical and organisational conditions and measures			
Provide a good standard of g	general ventilation (not less t	han 1 to 3 air changes per hour)	
Local exhaust ventilation - ef	fficiency of at least		90 %
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ure		≤ 60 °C
0.3. Exposure estimati	on and reference to it	ts source	
0.3.1. Environmental release			

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	0.01 %	ESVOC SPERC 4.4a.v1
Release to waste water from process	10.92 kg/day	ESVOC SPERC 4.4a.v1
Release fraction to air from process	30 %	ESVOC SPERC 4.4a.v1
Release to air from process	32800 kg/day	ESVOC SPERC 4.4a.v1
Release fraction to soil from process	0 %	ESVOC SPERC 4.4a.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.816	10.6	0.077	EUSES v2.1.2
Marine water	mg/l	0.077	1.06	0.073	EUSES v2.1.2
Freshwater sediment	mg/kg	3.579	30.4	0.118	EUSES v2.1.2
Marine water sediment	mg/kg	0.336	3.04	0.111	EUSES v2.1.2
Sewage treatment plant	mg/l	0.68	100	0.007	EUSES v2.1.2
Soil	mg/kg	0.931	29.5	0.032	EUSES v2.1.2

10.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

10.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 124/265

xposure estimate 69 mg/kg bw/day 21 mg/m³ 84 mg/m³ roduction where opportunity for exposure estimate		Method ECETOC TRA worker ECETOC TRA worker
21 mg/m³ 84 mg/m³ roduction where opportunity for exposure estimate	0.1 0.104 0.2 exposure arises (PROC4)	ECETOC TRA worker
34 mg/m³ roduction where opportunity for e xposure estimate	0.104 0.2 exposure arises (PROC4)	
roduction where opportunity for e xposure estimate	0.2 exposure arises (PROC4)	FCFTOC TRA worker
roduction where opportunity for e xposure estimate	exposure arises (PROC4)	FCFTOC TRA worker
xposure estimate		
	RCR	Method
86 mg/kg bw/day	0.037	ECETOC TRA worker
42 mg/m ³	0.2	ECETOC TRA worker
		F0FT00 TD4
	0.4	ECETOC TRA worker
	202	
		Method
3.71 mg/kg bw/day	0.074	ECETOC TRA worker
0.5 mg/m³		ECETOC TRA worker
10 10		505700 TDA
.7	0.1	ECETOC TRA worker
	DOD	Mathad
		Method
,		ECETOC TRA worker
23.5 mg/m³		ECETOC TRA worker
200/2		ECETOC TRAd.c.
	0.698	ECETOC TRA worker
	DOD	Mathad
	RCR	Method
,		ECETOC TRA worker
0.5 mg/m³		ECETOC TRA worker
10		F05700 TD4
0	0.1	ECETOC TRA worker
xposure estimate	RCR	Method
3.71 mg/kg bw/day	0.074	ECETOC TRA worker
23.5 mg/m³	0.35	ECETOC TRA worker
	0.424	
690 mg/m³	0.698	ECETOC TRA worker
xposure estimate	RCR	Method
572 mg/kg bw/day	0.046	ECETOC TRA worker
000 mg/m³	0.826	Used ART model (v1.5)
66 x x 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	8 mg/m³ ations (open systems) (PROC5) aposure estimate .71 mg/kg bw/day .5 mg/m³ 2 mg/m³ ations (open systems) (PROC5) aposure estimate .71 mg/kg bw/day 3.5 mg/m³ 90 mg/m³ ations (open systems) (PROC5) aposure estimate 871 mg/kg bw/day .5 mg/m³ 2 mg/m³ ations (open systems) (PROC5) aposure estimate .71 mg/kg bw/day 3.5 mg/m³ ations (open systems) (PROC5) aposure estimate .71 mg/kg bw/day 3.5 mg/m³ 90 mg/m³ praying (PROC7) aposure estimate 572 mg/kg bw/day	0.237 8 mg/m³ 0.4 1tions (open systems) (PROC5) 1tions (open systems) (PROC5) 1tions (open systems) (Open syste

Sum RCR - Long-term -		0.872	
systemic effects Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
.3.11. Worker exposure Industr			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.143 mg/kg bw/day	0.012	ECETOC TRA worker
Inhalation - Long-term - systemic effects	5.5 mg/m³	0.005	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects		0.017	
Acute - Local - Inhalation	242 mg/m³	0.1 ng and discharging) at non-dedicate	d facilities (PROCSa)
Route of exposure and type	Exposure estimate	RCR	Method
of effects	·		
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	· · · ·	ng and discharging) at non-dedicate	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
		ng and discharging) at non-dedicate	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	60.5 mg/m³	0.05	ECETOC TRA WOIKEI
systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
3.15. Worker exposure Transfe	er of substance or mixture (chargi	ng and discharging) at non-dedicate	d facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.057	ECETOC TRA worker
		ng and discharging) at dedicated fac	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
<u>'</u>		all containers (dedicated filling line,	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic	6.86 mg/kg bw/day	0.037	ECETOC TRA worker

Inhalation - Long-term -			
systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
10.3.18. Worker exposure Roller	application or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000 / 2	0.497	FOFTOO TDA
Acute - Local - Inhalation 10.3.19. Worker exposure Roller a	1690 mg/m³	0.698	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.497	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
10.3.20. Worker exposure Roller a		202	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.197	ESETOS TRA
Acute - Local - Inhalation 10.3.21. Worker exposure Roller a	242 mg/m³	0.1	ECETOC TRA worker
		RCR	Mathad
Route of exposure and type of effects	Exposure estimate		Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects			
	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	ū	0.197	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.197	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	ū	0.197	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic	242 mg/m³ ent of articles by dipping and pouri	0.197 0.1 ng (PROC13)	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects	242 mg/m³ ent of articles by dipping and pouri Exposure estimate	0.197 0.1 ng (PROC13) RCR	ECETOC TRA worker Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day	0.197 0.1 ng (PROC13) RCR 0.074	ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.23. Worker exposure Treatm Route of exposure and type	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.23. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri Exposure estimate	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.22. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 10.3.23. Worker exposure Treatm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	242 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day	0.197 0.1 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

10.3.24. Worker exposure Treatmo	ent of articles by dipping and pouri	ng (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	ent of articles by dipping and pouri		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040	0.057	ECETOC TRAd.c.
Acute - Local - Inhalation 10.3.26. Worker exposure Laborat	242 mg/m³	0.1	ECETOC TRA worker
·	·	DCD	Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4/2	0.102	ECETOC TDAdica
Acute - Local - Inhalation	484 mg/m³ activities involving hand contact (F	-	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.502	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
10.3.28. Worker exposure Manual	activities involving hand contact (F	PROC19)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.202	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
Route of exposure and type of effects	activities involving hand contact (F Exposure estimate	RCR	Method
Dermal - Long-term - systemic	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
effects Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
10.3.30. Worker exposure Equipm	nent cleaning and maintenance (PRO	DC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
effects Inhalation - Long-term -	,		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.31. Worker exposure Equipm	nent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
3.32. Worker exposure Equipm	nent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.33. Worker exposure Equipm	nent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES
4.1. Environment			
Guidance - Environment	No additional risk mana guarantee safe use for		ose that are mentioned above, are needed to
4.2. Health			
Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.		

08/08/2022 (Revision date) IE - en 129/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

11. AC SE11: Oil field well drilling and production operations

Oil field well drilling and production operations		n	ES Ref.: AC SE11 ES Type: Worker		Association ref code: IS
Environment					
CS 1	Oil field well dr	illing and production	operations	ERC4	
Worker					
CS 2		cposure or processes	closed process without s with equivalent	PROC1	
CS 3	process with o	uction or refinery in ccasional controlled tontainment condit	exposure or processes	PROC2	
CS 4		Use in closed batch process (synthesis or formulation); With occasional controlled exposure		PROC3	
CS 5		Use in batch and other process (synthesis) where opportunity for exposure arises		PROC4	
CS 6		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 7		ostance or mixture (o t non-dedicated facil		PROC8a	
CS 8		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		PROC8a	
CS 9		ostance or mixture (o t non-dedicated facil		PROC8a	
CS 10		Transfer of substance or mixture (charging and discharging) at dedicated facilities		PROC8b	
CS 11	Equipment cle	Equipment cleaning and maintenance		PROC8a, PRO	C28
CS 12	Equipment cle	Equipment cleaning and maintenance		PROC8a, PRO	C28
CS 13	Equipment cle	Equipment cleaning and maintenance		PROC8a, PRO	C28
CS 14	Fauipment cle	Equipment cleaning and maintenance		PROC8a, PRO	C28

11.2. Conditions of use affecting exposure

	60.61.1.01.00	
11.2.1. Control of environmental exposu	ire. Oil field well drilling and	nroduction operations (FRCA)

ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)		
Amount used, frequency and duration of use (or from service life)			
Daily amount per site	≤ 109.2 t/d		
Annual site tonnage (tons/ye	ear): ≤ 32760 t/yr		

Conditions and measures related to sewage treatment plant

Assumed domestic sewage treatment plant flow ≥ 2000 m³/d

Sludge treatment technique : Controlled application to agricultural soil

Conditions and measures related to treatment of waste (including article waste)

Dispose of waste in accordance with environmental legislation

Concentration of substance in product

PROC1

11.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

≤ 100 %

111001	containment conditions	initially in disease processes without intentions of exposure of processes with equivalent
Product (article) characteris	stics	
Physical form of product		Liquid

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

08/08/2022 (Revision date) IE - en 130/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.					
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ıre		≤ 56 °C		
1.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or rocesses with equivalent containment conditions (PROC2)					
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions				
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	· ≤ 100 %			
Amount used (or contained	d in articles) frequency an	d duration of use/exposure			
Exposure duration	a m amorooj, moquemoj am	≤ 8 h/day			
Technical and organisation	nal conditions and measur	es			
exposure or processes with	equivalent containment cond k that the risk management r	cess with occasional controlled litions measures in place are being used			
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ıre		≤ 56 °C		
	osure: Use in closed batch	process (synthesis or formulation);	With occasional controlled exposure		
PROC3)	Manufacture or formulation	o in the objectively industry in closed betal	n was a constant to the constant of the consta		
PROC3	or processes with equivale		n processes with occasional controlled exposure		
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	≤ 100 %			
Amount used (or contained	d in articles), frequency an	d duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisation	nal conditions and measur	es			
Use in closed batch process	(synthesis or formulation). V	Vith occasional controlled exposure			
Supervision in place to chec correctly and operation cond		measures in place are being used			
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ıre		≤ 56 °C		
1.2.5. Control of worker expenses	osure: Use in batch and ot	her process (synthesis) where opport	tunity for exposure arises (PROC4)		
PROC4	Chemical production where	e opportunity for exposure arises			
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	n product	≤ 100 %			
Amount used (or contained	d in articles), frequency an	d duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.					
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ıre		≤ 56 °C		
1.2.6. Control of worker exposure: Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)					
PROC8a	Transfer of substance or m	nixture (charging and discharging) at nor	n-dedicated facilities		

08/08/2022 (Revision date) IE - en 131/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency and duration of use/exposure				
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and measur	res			
Provide a good standard of general ventilation (not less	30 %			
Efficiency Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used			
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
I.2.7. Control of worker exposure: Transfer of substar	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)		
PROC8a Transfer of substance or r	mixture (charging and discharging) at r	non-dedicated facilities		
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency ar	nd duration of use/exposure			
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and measur	res			
Provide a good standard of general ventilation (not less Efficiency		30 %		
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used			
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
1.2.8. Control of worker exposure: Transfer of substan				
PROC8a Transfer of substance or r	mixture (charging and discharging) at r	non-dedicated facilities		
	(0 0			
Product (article) characteristics	, , , , , , , , , , , , , , , , , , , ,			
Physical form of product	Liquid			
Physical form of product	Liquid ≤ 100 %			
Physical form of product Concentration of substance in product	Liquid ≤ 100 %			
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency ar	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day			
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed.	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day res measures in place are being used			
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency ar Exposure duration Technical and organisational conditions and measur Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation			
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%).	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation	90 % (APF 10)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%).	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation	90 %		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation	90 % (APF 10)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure. Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect. Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation :	90 % (APF 10) ≤ 320 °C		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure. Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect. Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature 2.9. Control of worker exposure: Transfer of substantial	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation :	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure. Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect. Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature 2.9. Control of worker exposure: Transfer of substantial	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation :	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature 1.2.9. Control of worker exposure: Transfer of substance or the product (article) characteristics	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used ction, hygiene and health evaluation : Ince or mixture (charging and discharmixture (charging and discharging) at research	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
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Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure. Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect. Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature 2.9. Control of worker exposure: Transfer of substance or in the product (article) characteristics Physical form of product	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used etion, hygiene and health evaluation : Ince or mixture (charging and discharmixture (charging and discharging) at resemble to the charging and discharging) at resemble to the charging and discharging and discharging and discharging) at resemble to the charging and discharging and disc	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature 1.2.9. Control of worker exposure: Transfer of substance or in Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used etion, hygiene and health evaluation : Ince or mixture (charging and discharmixture (charging and discharging) at resemble to the charging and discharging) at resemble to the charging and discharging and discharging and discharging) at resemble to the charging and discharging and disc	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
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Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measures. Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect. Wear a respirator providing a minimum efficiency of (%). Other conditions affecting workers exposure indoor,and/or,Outdoor Maximum process temperature 1.2.9. Control of worker exposure: Transfer of substance or in the product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used etion, hygiene and health evaluation : Ince or mixture (charging and discharmixture (charging and discharging) at res Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		
Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Supervision in place to check that the risk management correctly and operation conditions followed. Conditions and measures related to personal protect Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature 1.2.9. Control of worker exposure: Transfer of substance or in Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measures.	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res measures in place are being used etion, hygiene and health evaluation : Ince or mixture (charging and discharmixture (charging and discharging) at res Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res	90 % (APF 10) ≤ 320 °C rging) at non-dedicated facilities (PROC8a)		

08/08/2022 (Revision date) IE - en 132/265

When conditions off.	n conditions followed.		
	ecting workers exposure		
ndoor	poroturo		≤ 56 °C
Maximum process tem	•	substance or mixture (charging and disch	
PROC8b		ce or mixture (charging and discharging) at d	
		ce of mixture (charging and discharging) at o	ledicated facilities
Product (article) char			
Physical form of produ		Liquid	
Concentration of subst	tance in product	≤ 100 %	
Amount used (or con	tained in articles), frequer	ncy and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Supervision in place to		neasures ement measures in place are being used	
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	ecting workers exposure		
ndoor,and/or,Outdoor	an a ratura		Z 56 °C
Maximum process tem	•	(22222	≤ 56 °C
		cleaning and maintenance (PROC8a, PRO	
PROC88		ce or mixture (charging and discharging) at n	ion-aedicated facilities
PROC28	ivianual maintenanc	e (cleaning and repair) of machinery	
Product (article) char			
Physical form of produ		Liquid	
Concentration of subst	tance in product	≤ 100 %	
Amount used (or cor	tained in articles), frequer	ncy and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Supervision in place to	check that the risk manage	ement measures in place are being used	
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ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

outdoor

Maximum process temperature ≤ 56 °C

11.2.14. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC28	Manual maintenance (cleaning and repair) of machinery

Product (article) characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least	90 %
Supervision in place to check that the risk management measures in place are being used	
correctly and operation conditions followed.	

Other conditions affecting workers exposure

maoor	
Maximum process temperature	≤ 56 °C

11.3. Exposure estimation and reference to its source

11.3.1. Environmental release and exposure Oil field well drilling and production operations (ERC4)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	0.01 %	ESVOC SPERC 4.5a.v1
Release to waste water from process	10.92 kg/day	ESVOC SPERC 4.5a.v1
Release fraction to air from process	30 %	ESVOC SPERC 4.5a.v1
Release to air from process	32800 kg/day	ESVOC SPERC 4.5a.v1
Release fraction to soil from process	0 %	ESVOC SPERC 4.5a.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.816	10.6	0.077	EUSES v2.1.2
Marine water	mg/l	0.077	1.06	0.073	EUSES v2.1.2
Freshwater sediment	mg/kg	3.579	30.4	0.118	EUSES v2.1.2
Marine water sediment	mg/kg	0.336	3.04	0.111	EUSES v2.1.2
Sewage treatment plant	mg/l	0.68	100	0.007	EUSES v2.1.2
Soil	mg/kg	0.931	29.5	0.032	EUSES v2.1.2

11.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 134/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

11.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processe
with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.057		
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker	
1.3.4. Worker exposure Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)				

11

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

11.3.5. Worker exposure Use in batch and other process (synthesis) where opportunity for exposure arises (PROC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.237	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

11.3.6. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

11.3.7. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

11.3.8. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker

11.3.9. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 135/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term -		0.057	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.3.10. Worker exposure Transfe			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
.3.11. Worker exposure Equipm	nent cleaning and maintenance	(PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
.3.12. Worker exposure Equipm			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000/3	0.424	FOFTOO TDA
Acute - Local - Inhalation 3.13. Worker exposure Equipm	1690 mg/m³	0.698	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Dermal - Long-term - systemic effects			
effects Inhalation - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
effects	423.5 mg/m³	0.35 0.424	ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type	1690 mg/m³ nent cleaning and maintenance	0.424 0.698 2 (PROC8a, PROC28)	ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation .3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	1690 mg/m³ nent cleaning and maintenance Exposure estimate	0.424 0.698 (PROC8a, PROC28) RCR 0.007 0.05	ECETOC TRA worker Method
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.424 0.698 PROC8a, PROC28) RCR 0.007 0.05 0.057	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.424 0.698 PROC8a, PROC28) RCR 0.007 0.05 0.057	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.424 0.698 PROC8a, PROC28) RCR 0.007 0.05 0.057	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³	0.424 0.698 PROC8a, PROC28) RCR 0.007 0.05 0.057	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4. Guidance to Downstr	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ eam User to evaluate wh	0.424 0.698 (PROC8a, PROC28) RCR 0.007 0.05 0.057 0.1 nether he works inside	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 4. Guidance to Downstr 4.1. Environment	1690 mg/m³ nent cleaning and maintenance Exposure estimate 1.371 mg/kg bw/day 60.5 mg/m³ 242 mg/m³ eam User to evaluate wh	0.424 0.698 (PROC8a, PROC28) RCR 0.007 0.05 0.057 0.1 nether he works inside	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker the boundaries set by the ES which may not be applicable to all sites; thus,

08/08/2022 (Revision date) IE - en 136/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

12. AC SE12: Blowing agent

2.1. Title section				
Blowing agent		ES Ref.: A	AC SE12 : Worker	Association ref code: IS
Environment				
CS 1	Use in blowing agents		ERC4	
Worker				
CS 2	Chemical production or refinery likelihood of exposure or process containment conditions		PROC1	
CS 3	process with occasional controlle	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions		
CS 4		Use in closed batch process (synthesis or formulation); With occasional controlled exposure		
CS 5	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 6	Transfer of substance or mixture (dedicated filling line, including w		PROC9	
CS 7	Use as a blowing agent		PROC12	
CS 8	Equipment cleaning and mainter	nance	PROC8a, PROC	28
CS 9	Equipment cleaning and mainter	Equipment cleaning and maintenance		28
CS 10	Equipment cleaning and mainter	Equipment cleaning and maintenance		28
CS 11	Equipment cleaning and maintenance		PROC8a, PROC	28
Processes, tasks, activities	covered Use at industrial s	sites (IS)		

12.2.1. Control of environmental exposure: Use in blowing agents (ERC4)				
	12.2.1 Contro	ol of environmental evi	nosure: Use in blowing :	agents (FRC4)

ERC4	Use of non-reactive proces	ssing aid at industrial site (no inclusion into or onto article)
Amount used, frequency and duration of use (or from service life)		
Daily amount per site		≤ 109.2 t/d
Annual site tonnage (tons/ye	ar):	≤ 32760 t/yr
Conditions and measures related to sewage treatment plant		
Assumed domestic sewage t	reatment plant flow	≥ 2000 m³/d
Sludge treatment technique :	1	Controlled application to agricultural soil
Conditions and measures related to treatment of waste (including article waste)		
Dispose of waste in accordar legislation	nce with environmental	

12.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

containment conditions	
Product (article) characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used

correctly and operation conditions followed. Other conditions affecting workers exposure

PROC1

Other conditions affecting workers exposure	
indoor,and/or,outdoor	
Maximum process temperature	≤ 56 °C

08/08/2022 (Revision date) IE - en 137/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

12.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or
processes with equivalent containment conditions (PROC2)

PROC2	Chemical production or rewith equivalent containment		n occasional controlled exposure or processes
Product (article) charact	teristics		
Physical form of product Liquid			
Concentration of substance	ce in product	≤ 100 %	
Amount used (or contain	ned in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisat	ional conditions and measu	res	
Chemical production or re exposure or processes with	finery in closed continuous pro th equivalent containment con eck that the risk management	ocess with occasional controlled	
Other conditions affection	ng workers exposure		
indoor,and/or,outdoor			
Maximum process temper	rature		≤ 56 °C
.2.4. Control of worker e	xposure: Use in closed batcl	n process (synthesis or formulation);	With occasional controlled exposure
ROC3) PROC3	Manufacture or formulation	•	ch processes with occasional controlled exposure
Product (article) charact	teristics		
Physical form of product		Liquid	
Concentration of substance	ce in product	≤ 100 %	
	•	1	
•	ned in articles), frequency ar		
Exposure duration		≤ 8 h/day	
Technical and organisat	ional conditions and measu	res	
Use in closed batch proce	ess (synthesis or formulation).	With occasional controlled exposure	
Supervision in place to ch correctly and operation co		measures in place are being used	
Other conditions affection	ng workers exposure		
indoor,and/or,outdoor			
Maximum process temper	rature		≤ 56 °C
	· .	`	ging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or	mixture (charging and discharging) at de	edicated facilities
Product (article) charact	teristics		
Physical form of product		Liquid	
Concentration of substance	ce in product	≤ 100 %	
Amount used (or contain	ned in articles), frequency ar	nd duration of use/exposure	
Exposure duration	and the second s	≤ 8 h/day	
•	ional conditions and measu	,	
Supervision in place to ch	eck that the risk management	measures in place are being used	
correctly and operation co			<u> </u>
· ·			
Other conditions affection	ing workers exposure		
Other conditions affection indoor, and/or, outdoor Maximum process temper	•		≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper	rature	nce or mixture into small containers (≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker expenses the conditions affect the conditions a	rature	nce or mixture into small containers (≤ 56 °C dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker exerces	rature xposure: Transfer of substat	nce or mixture into small containers (dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker execces PROC9	rature xposure: Transfer of substant Transfer of substance or		dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker exacces PROC9 Product (article) characteristics	rature xposure: Transfer of substant Transfer of substance or	oreparation into small containers (dedica	dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker execcy) PROC9 Product (article) charact Physical form of product	rature xposure: Transfer of substance or presented to the control of the control	preparation into small containers (dedica	dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker execcy) PROC9 Product (article) charact Physical form of product Concentration of substance	rature xposure: Transfer of substance or Transfer of substance or teristics te in product	oreparation into small containers (dedica Liquid ≤ 100 %	dedicated filling line, including weighing)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.6. Control of worker execcy) PROC9 Product (article) charact Physical form of product Concentration of substance	rature xposure: Transfer of substance or presented to the control of the control	oreparation into small containers (dedica Liquid ≤ 100 %	dedicated filling line, including weighing)

08/08/2022 (Revision date) IE - en 138/265

Technical and organisation		res measures in place are being used	
correctly and operation cond	litions followed.	measures in place are being used	
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperat			≤ 56 °C
2.7. Control of worker exp		<u> </u>	
PROC12	Use of blowing agents in I	manufacture of foam	
Product (article) character	istics	1	
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measu	res	
Supervision in place to chec correctly and operation cond	k that the risk management litions followed.	measures in place are being used	
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperat	ure		≤ 56 °C
2.8. Control of worker exp	osure: Equipment cleaning	g and maintenance (PROC8a, PROC	28)
PROC8a	Transfer of substance or r	nixture (charging and discharging) at r	non-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles). frequency ar	nd duration of use/exposure	
Exposure duration	,,	≤ 8 h/day	
•	nal conditions and moasu	,	
Technical and organisation		measures in place are being used	
correctly and operation cond		measures in place are being used	
Conditions and measures	related to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%):		90 %
			(APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperat			≤ 56 °C
<u> </u>		g and maintenance (PROC8a, PROC	·
PROC8a		mixture (charging and discharging) at n	non-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) character	istics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	res	
		than 3 to 5 air changes per hour).	30 %
Efficiency	`		
Supervision in place to chec correctly and operation cond		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
	ure		≤ 56 °C
Maximum process temperat			
Maximum process temperat		ng and maintenance (PROC8a, PROmitture (charging and discharging) at n	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

PROC28	Manual maintenance (clea	ning and repair) of machinery			
Product (article) characteristics					
Physical form of product		Liquid			
Concentration of substance in	Concentration of substance in product ≤ 100 %				
Amount used (or contained	l in articles), frequency an	d duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisation	al conditions and measure	es			
	Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.				
Other conditions affecting	workers exposure				
outdoor					
Maximum process temperatu	ire		≤ 56 °C		
12.2.11. Control of worker exp	osure: Equipment cleanin	g and maintenance (PROC8a, PROC2	28)		
PROC8a	Transfer of substance or m	nixture (charging and discharging) at nor	n-dedicated facilities		
PROC28	Manual maintenance (clea	ning and repair) of machinery			
Product (article) characteri	stics				
Physical form of product	Physical form of product				
Concentration of substance in product		≤ 100 %			
Amount used (or contained	l in articles), frequency an	d duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisational conditions and measures					

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)

Local exhaust ventilation - efficiency of at least

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

Maximum process temperature ≤ 56 °C

12.3. Exposure estimation and reference to its source

12.3.1. Environmental release and exposure Use in blowing agents (ERC4)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	0.1 %	ESVOC SPERC 4.9.v1
Release to waste water from process	109.2 kg/day	ESVOC SPERC 4.9.v1
Release fraction to air from process	100 %	ESVOC SPERC 4.9.v1
Release to air from process	109000 kg/day	ESVOC SPERC 4.9.v1
Release fraction to soil from process	0 %	ESVOC SPERC 4.9.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	1.428	10.6	0.135	EUSES v2.1.2
Marine water	mg/l	0.138	1.06	0.13	EUSES v2.1.2
Freshwater sediment	mg/kg	6.263	30.4	0.206	EUSES v2.1.2
Marine water sediment	mg/kg	0.605	3.04	0.199	EUSES v2.1.2
Sewage treatment plant	mg/l	6.799	100	0.068	EUSES v2.1.2
Soil	mg/kg	3.118	29.5	0.106	EUSES v2.1.2

12.3.2. Worker exposure Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.024 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.097 mg/m³	0	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 140/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

12.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes
with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.057		
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker	
2.3.4. Worker exposure Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)				

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.104	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

12.3.5. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker

12.3.6. Worker exposure Transfer of substance or mixture into small containers (dedicated filling line, including weighing) (PROC9)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	484 mg/m³	0.4	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker

12.3.7. Worker exposure Use as a blowing agent (PROC12)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.202	
Acute - Local - Inhalation	968 mg/m ³	0.4	ECETOC TRA worker

12.3.8. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.124	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker

12.3.9. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 141/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.424		
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker	
3.10. Worker exposure Equipm	ent cleaning and maintenan	ce (PROC8a, PROC28)		
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
nhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.424		
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker	
3.11. Worker exposure Equipm	ent cleaning and maintenan	ce (PROC8a, PROC28)		
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker	
nhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.057		
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker	
4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES	
.1. Environment				
			ed operating conditions which may not be applicable to all sites; thus, define appropriate site-specific risk management measures	
1.2. Health				
Guidance - Health No additional risk manage guarantee safe use for wo			ose that are mentioned above, are needed to	

142/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

13. AC SE13: Use in mining chemicals

3.1. Title section					
Use in mining chemicals		ES Ref.: AC SE13 ES Type: Worker		Association ref code: IS	
Environment					
CS 1	Use in mining chemicals	Jse in mining chemicals			
Worker					
CS 2		Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions			
CS 3	process with occasional controll	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions		PROC2	
CS 4		Use in closed batch process (synthesis or formulation); With occasional controlled exposure			
CS 5	Use in batch and other process opportunity for exposure arises	Use in batch and other process (synthesis) where opportunity for exposure arises			
CS 6	Mixing operations (open system	Mixing operations (open systems)			
CS 7	Mixing operations (open system	Mixing operations (open systems)			
CS 8	Mixing operations (open system	Mixing operations (open systems)			
CS 9	Mixing operations (open system	Mixing operations (open systems)			
CS 10		Transfer of substance or mixture (charging and discharging) at dedicated facilities			
CS 11		Transfer of substance or mixture into small containers (dedicated filling line, including weighing)			
CS 12	Equipment cleaning and mainte	Equipment cleaning and maintenance		28	
CS 13	Equipment cleaning and mainte	Equipment cleaning and maintenance		28	
CS 14	Equipment cleaning and mainte	Equipment cleaning and maintenance		28	
CS 15	Equipment cleaning and mainte	Equipment cleaning and maintenance		228	
Processes, tasks, activities covered Use at industri		sites (IS)			

13.2. Conditions of use affecting exposure

	13.2.1. Control of environmental ex	posure: Use in mining chemicals ((ERC4)
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ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)

Amount used, frequency and duration of use (or from service life)

Daily amount per site ≤ 2 t/d Annual site tonnage (tons/year): ≤ 600 t/yr

Conditions and measures related to sewage treatment plant

Assumed domestic sewage treatment plant flow ≥ 2000 m³/d

Sludge treatment technique: Controlled application to agricultural soil

Conditions and measures related to treatment of waste (including article waste)

Dispose of waste in accordance with environmental legislation

13.2.2. Control of worker exposure: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions (PROC1)

PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Product (article) characteristics

Physical form of product Liquid Concentration of substance in product ≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Technical and organisational conditions and measures

Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

08/08/2022 (Revision date) 143/265 IE - en

CAS-No.: 67-64-1 Floudet form: 3	ubstance Physical state. Liquic	Substance type: Mono-constituent			
Other conditions affecting workers exposure					
indoor,and/or,outdoor					
Maximum process temperature ≤ 56 °C					
			ocess with occasional controlled exposure or		
processes with equivalent co	,	<u> </u>			
PROC2	with equivalent containme		occasional controlled exposure or processes		
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	≤ 100 %			
Amount used (or contained	d in articles), frequency an	nd duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisation	nal conditions and measur	res			
Chemical production or refin exposure or processes with	ery in closed continuous pro equivalent containment cond k that the risk management	cess with occasional controlled			
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ure		≤ 56 °C		
	osure: Use in closed batch	n process (synthesis or formulation);	With occasional controlled exposure		
(PROC3)					
PROC3	Manufacture or formulatio or processes with equivale		h processes with occasional controlled exposure		
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	≤ 100 %			
Amount used (or contained	d in articles), frequency an	nd duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organisation	nal conditions and measur	res			
Use in closed batch process	(synthesis or formulation). \	With occasional controlled exposure			
Supervision in place to chec correctly and operation cond		measures in place are being used			
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate	ure		≤ 56 °C		
13.2.5. Control of worker expe	osure: Use in batch and ot	ther process (synthesis) where oppor	tunity for exposure arises (PROC4)		
PROC4	Chemical production where	re opportunity for exposure arises			
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	≤ 100 %			
Amount used (or contained in articles), frequency and duration of use/exposure					
Exposure duration ≤ 8 h/day					
Technical and organisational conditions and measures					
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.					
Other conditions affecting	workers exposure				
indoor,and/or,outdoor					
Maximum process temperate			≤ 56 °C		
13.2.6. Control of worker expenses					
PROC5	Mixing or blending in batch	h processes			
Product (article) character	istics				
Physical form of product		Liquid			
Concentration of substance	in product	≤ 100 %			
08/08/2022 (Revision date)		IE - en	144/265		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contained	in articles), frequency an		
Exposure duration		≤ 8 h/day	
Technical and organisationa	I conditions and measur	res	
Supervision in place to check to correctly and operation conditi		measures in place are being used	
Conditions and measures re	lated to personal protec	tion, hygiene and health evaluation	
Wear a respirator providing a r	minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting w	orkers exposure		
indoor,and/or,outdoor			
Maximum process temperature	Э		≤ 56 °C
2.7. Control of worker expos	sure: Mixing operations (open systems) (PROC5)	
PROC5	Mixing or blending in batc	h processes	
Product (article) characteris	tics		
Physical form of product		Liquid	
Concentration of substance in	product	· ≤ 100 %	
Amount used for contained	in articles) frequency an	ad duration of uso/ovnosuro	
Amount used (or contained Exposure duration	in anticies), frequency an	≤ 8 h/day	
<u>'</u>		•	
Technical and organisationa			
Provide a good standard of ge Efficiency	neral ventilation (not less	than 3 to 5 air changes per hour).	30 %
		measures in place are being used	
Other conditions affecting w	orkers exposure		
indoor			
Maximum process temperature	Э		≤ 56 °C
2.8. Control of worker expos	sure: Mixing operations (open systems) (PROC5)	
PROC5	Mixing or blending in batc	h processes	
Product (article) characteris	tics		
Physical form of product		Liquid	
Concentration of substance in	product	· ≤ 100 %	
Amount used (or contained	•	nd duration of use/exposure	
Exposure duration	in articles), frequency ar	≤ 8 h/day	
·		,	
Technical and organisationa			
		than 1 to 3 air changes per hour)	00.04
Local exhaust ventilation - effice		measures in place are being used	90 %
correctly and operation conditi		modeling in place are semiglaced	
Other conditions affecting w	orkers exposure		
indoor			
Maximum process temperature	е		≤ 56 °C
2.9. Control of worker expos	sure: Mixing operations (open systems) (PROC5)	
PROC5	Mixing or blending in batch	h processes	
Product (article) characteris	tics		
Physical form of product		Liquid	
Concentration of substance in	product	≤ 100 %	
	•		
Amount used (or contained	in articles), frequency an		
Exposure duration		≤ 8 h/day	
Technical and organisationa	I conditions and measur	res	
Supervision in place to check to correctly and operation conditi		measures in place are being used	
Other conditions affecting w	orkers exposure		
outdoor			

145/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

PROC8b	i ransier of substance of i	mixture (charging and discharging) at c	dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and measu	res	
		measures in place are being used	
correctly and operation cor			
Other conditions affecting	g workers exposure		
indoor,and/or,outdoor Maximum process tempera	atura		≤ 56 °C
· · · · · · · · · · · · · · · · · · ·		ance or mixture into small container	s (dedicated filling line, including weighing)
PROC9	Transfer of substance or	preparation into small containers (dedic	cated filling line, including weighing)
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	,	≤ 8 h/day	
·	onal conditions and measu	•	
		measures in place are being used	
correctly and operation cor	· · · · · · · · · · · · · · · · · · ·		
Other conditions affecting	g workers exposure		
indoor,and/or,outdoor			
Maximum process tempera	ature		≤ 56 °C
		ng and maintenance (PROC8a, PRO	<u> </u>
PROC8a		mixture (charging and discharging) at r	non-dedicated facilities
PROC28		aning and repair) of machinery	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and measu	res	
correctly and operation cor	nditions followed.	measures in place are being used	
		ction, hygiene and health evaluation	
Wear a respirator providing	g a minimum efficiency of (%)	:	90 % (APF 10)
Other conditions affecting	g workers exposure		
indoor,and/or,Outdoor			
Maximum process tempera	ature		≤ 56 °C
		ng and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or	mixture (charging and discharging) at r	non-dedicated facilities
PROC28	Manual maintenance (cle	aning and repair) of machinery	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	· ≤ 100 %	
Amount used (or contain	ed in articles). frequency a	nd duration of use/exposure	

08/08/2022 (Revision date) IE - en 146/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisational conditions and measures

Provide a good standard of of Efficiency	general ventilation (not less t	30 %		
Supervision in place to chec correctly and operation cond				
Other conditions affecting	workers exposure			
indoor				
Maximum process temperate	ure	≤ 56 °C		
13.2.14. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PROC2	28)	
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities			
PROC28	Manual maintenance (cleaning and repair) of machinery			
Product (article) characteristics				
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or contained	d in articles), frequency an	d duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisation	nal conditions and measur	es		

correctly and operation conditions followed.

Other conditions affecting workers exposure
outdoor

13.2.15. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)

Supervision in place to check that the risk management measures in place are being used

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC28	Manual maintenance (cleaning and repair) of machinery

≤ 56 °C

Product (article) characteristics

Maximum process temperature

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)

Local exhaust ventilation - efficiency of at least

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Other conditions affecting workers exposure

Indoor

Maximum process temperature ≤ 56 °C

13.3. Exposure estimation and reference to its source

13.3.1. Environmental release and exposure Use in mining chemicals (ERC4)

Release route	Release rate	Release estimation method
Receiving surface water flow is 18000 m³/d		
Release fraction to wastewater	50 %	ESVOC SPERC 4.23.v1
Release to waste water from process	1000 kg/day	ESVOC SPERC 4.23.v1
Release fraction to air from process	5 %	ESVOC SPERC 4.23.v1
Release to air from process	100 kg/day	ESVOC SPERC 4.23.v1
Release fraction to soil from process	5 %	ESVOC SPERC 4.23.v1

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	6.445	10.6	0.608	EUSES v2.1.2
Marine water	mg/l	0.64	1.06	0.604	EUSES v2.1.2
Freshwater sediment	mg/kg	28.27	30.4	0.93	EUSES v2.1.2
Marine water sediment	mg/kg	2.805	3.04	0.923	EUSES v2.1.2
Sewage treatment plant	mg/l	56.97	100	0.57	EUSES v2.1.2

Soil n	ng/kg	0.859	29.5	0.029	EUSES v2.1.2
3.2. Worker exposure Chematainment conditions (PRO		or refinery in	closed process without	likelihood of ex	posure or processes with equivalent
Route of exposure and type of effects	<u> </u>	stimate	RCR		Method
Dermal - Long-term - systemi effects	c 0.034 mg/kg	bw/day	0		ECETOC TRA worker
nhalation - Long-term - systemic effects	0.024 mg/m	3	0		ECETOC TRA worker
Sum RCR - Long-term - systemic effects			0		
Acute - Local - Inhalation	0.097 mg/m		0		ECETOC TRA worker
3.3. Worker exposure Chem h equivalent containment c			closed continuous proc	ess with occasion	onal controlled exposure or process
Route of exposure and type of effects			RCR		Method
Dermal - Long-term - systemi effects	c 1.37 mg/kg	bw/day	0.007		ECETOC TRA worker
nhalation - Long-term - systemic effects	60.5 mg/m³		0.05		ECETOC TRA worker
Sum RCR - Long-term - systemic effects	242 / 2		0.057		FOETOO TDAdisa
Acute - Local - Inhalation	242 mg/m³	rocoss (exectle	0.1	ith occasional	ECETOC TRA worker
Route of exposure and type	·	` *	esis or formulation); Wi	un occasional co	ontrolled exposure (PROC3) Method
of effects Dermal - Long-term - systemi	c 0.69 mg/kg	bw/day	0.004		ECETOC TRA worker
effects Inhalation - Long-term - systemic effects	121 mg/m³		0.1		ECETOC TRA worker
Sum RCR - Long-term - systemic effects			0.104		
Acute - Local - Inhalation	484 mg/m³		0.2		ECETOC TRA worker
3.5. Worker exposure Use i	n batch and othe	er process (sy	nthesis) where opportur	nity for exposure	e arises (PROC4)
Route of exposure and type of effects	e Exposure e	stimate	RCR		Method
Dermal - Long-term - systemi effects		bw/day	0.037		ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³		0.2		ECETOC TRA worker
Sum RCR - Long-term - systemic effects	000 (5		0.237		E05T00 TD :
Acute - Local - Inhalation	968 mg/m³		0.4		ECETOC TRA worker
3.6. Worker exposure Mixin	3 - p (-)				
Route of exposure and type of effects	·		RCR		Method
Dermal - Long-term - systemi effects	0 0	bw/day	0.074		ECETOC TRA worker
nhalation - Long-term - systemic effects Sum RCR - Long-term -	60.5 mg/m³		0.05		ECETOC TRA worker
systemic effects Acute - Local - Inhalation	242 mg/m³		0.124		ECETOC TRA worker
3.7. Worker exposure Mixin		en sys <u>tems)</u> (
Route of exposure and type of effects			RCR		Method
	c 13.71 mg/kg	bw/day	0.074		ECETOC TRA worker
Dermal - Long-term - systemi effects Inhalation - Long-term - systemic effects	423.5 mg/m	3	0.35		ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects			0.424		
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³		0.424		ECETOC TRA worker ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.8. Worker exposure Mixin	1690 mg/m³	pen systems) (0.424 0.698 PROC5)		ECETOC TRA worker
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³ g operations (operations)	oen systems) (stimate	0.424		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	operations (open systems) (PRC		EGET GG TTU (WGING)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker
3.3.10. Worker exposure Transfe			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1450 mg/m3	0.374	ECETOC TDAarkar
	1450 mg/m³		ECETOC TRA worker
			filling line, including weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	484 mg/m³	0.4	ECETOC TRA worker
systemic effects		0.437	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
3.3.12. Worker exposure Equipn			
Route of exposure and type	Exposure estimate	RCR	Method
of effects			ECETOC TRA worker
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	13.71 mg/kg bw/day 60.5 mg/m³	0.05	ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	60.5 mg/m ³	0.05 0.124	ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	60.5 mg/m ³	0.05 0.124 0.1	
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.13. Worker exposure Equipm Route of exposure and type	60.5 mg/m ³	0.05 0.124 0.1	ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.13. Worker exposure Equipm	60.5 mg/m³ 242 mg/m³ nent cleaning and maintenance	0.05 0.124 0.1 (PROC8a, PROC28)	ECETOC TRA worker ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic	60.5 mg/m³ 242 mg/m³ nent cleaning and maintenance Exposure estimate	0.05 0.124 0.1 (PROC8a, PROC28) RCR	ECETOC TRA worker ECETOC TRA worker Method
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	60.5 mg/m³ 242 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ 242 mg/m³ ment cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm	242 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nent cleaning and maintenance	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698 (PROC8a, PROC28)	ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³ 242 mg/m³ ment cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects	242 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698 (PROC8a, PROC28) RCR 0.074	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	60.5 mg/m³ 242 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nent cleaning and maintenance Exposure estimate	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698 (PROC8a, PROC28) RCR 0.074 0.35	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.13. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.14. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term -	242 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ nent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day	0.05 0.124 0.1 (PROC8a, PROC28) RCR 0.074 0.35 0.424 0.698 (PROC8a, PROC28) RCR 0.074	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

08/08/2022 (Revision date) IE - en 149/265

Guidance - Health

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

13.3.15. Worker exposure Equipm	ent cleaning and maintenance (PR	OC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.371 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.057	
Acute - Local - Inhalation	242 mg/m ³	0.1	ECETOC TRA worker
13.4. Guidance to Downstro 13.4.1. Environment	eam User to evaluate whethe	er he works inside the bound	aries set by the ES
Guidance - Environment	No additional risk managemer guarantee safe use for enviror	nt measures, besides those that are meanment.	entioned above, are needed to
13.4.2. Health			

guarantee safe use for workers.

No additional risk management measures, besides those that are mentioned above, are needed to

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

14. AC SE14: Use in laboratories

Use in laboratories			ES Ref.: AC SE14	Association ref code: PW	
			ES Type: Worker		
Environment					
CS 1	Use in laboratorie	S	ERC8a		
Worker					
CS 2	Roller application	or brushing	PROC10		
CS 3	Roller application	or brushing	PROC10		
CS 4	Roller application	or brushing	PROC10		
CS 5	Use as laboratory	Use as laboratory reagent			
CS 6	Manual activities i	Manual activities involving hand contact		PROC19	
CS 7	Manual activities i	Manual activities involving hand contact		PROC19	
CS 8	Manual activities i	involving hand contact	PROC19		
CS 9	Equipment cleanii	ng and maintenance	PROC8a,	PROC28	
CS 10	Equipment cleanii	ng and maintenance	PROC8a,	PROC28	
CS 11	Equipment cleanii	ng and maintenance	PROC8a,	PROC28	
Processes, tasks, activition	es covered Wi	idespread use by profession	nal workers (PW)		
.2. Conditions of u	se affecting exposure				
2.1. Control of environn	nental exposure: Use in lab	ooratories (ERC8a)			
ERC8a	Widespread use of non-	reactive processing aid (no	inclusion into or onto article	e, indoor)	
Amount used, frequenc	y and duration of use (or fr	om service life)			
Amounts used		≤ 0.021 t/d			
Conditions and measur	es related to sewage treatm	nent plant			
Municipal Sewage Treatn	nent Plant				

14.2.2. Control of worker exposure: Roller application or brushing	

Dispose of waste in accordance with environmental

legislation

PROC10	Roller application or brushing				
Product (article) characteristics					
Physical form of product		Liquid			
Concentration of substance in product		≤ 100 %			
Amount used (or contained in articles), frequency and duration of use/exposure					
Exposure duration		≤ 8 h/day			
Technical and organisation	nal conditions and measur	es			
Provide a good standard of	controlled ventilation (5 to 10	air changes per hour). Efficiency	70 %		
Supervision in place to check that the risk management recorrectly and operation conditions followed.		measures in place are being used			
Other conditions affecting workers exposure					
indoor					
Maximum process temperate	ure		≤ 320 °C		

14.2.3. Control of worker exposure: Roller application or brushing (PROC10)

4.2.3. Control of worker exposure. Roller application of brushing (FROOTO)				
PROC10	Roller application or brushing			
Product (article) characteristics				
Physical form of product		Liquid		
Concentration of substance in product		≤ 100 %		
Amount used (or contained in articles), frequency and duration of use/exposure				
Exposure duration		≤ 8 h/day		
Technical and organisational conditions and measures				
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.				

08/08/2022 (Revision date) IE - en 151/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

		(APF 10)
Other conditions affecting workers exposure	•	
indoor,and/or,Outdoor		
Maximum process temperature	≤ 320 °C	
.2.4. Control of worker exposure: Roller appl		
PROC10 Roller application	or brushing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	uency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	I measures	
Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		80 %
Supervision in place to check that the risk mana correctly and operation conditions followed.	agement measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
.2.5. Control of worker exposure: Use as labor	pratory reagent (PROC15)	
PROC15 Use as laboratory		
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency duration	Sency and duration of use/exposure ≤ 8 h/day	
Exposure duration	,	
Technical and organisational conditions and		
Supervision in place to check that the risk mana correctly and operation conditions followed.	agement measures in place are being used	
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 320 °C
.2.6. Control of worker exposure: Manual act	ivities involving hand contact (PROC19)	
PROC19 Manual activities	involving hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
·	ionay and direction of usa/aypasura	
Amount used (or contained in articles), frequexposure duration	≤ 8 h/day	
<u>'</u>	, , , , , , , , , , , , , , , , , , ,	
Technical and organisational conditions and		700/
Provide a good standard of controlled ventilatio Supervision in place to check that the risk mana correctly and operation conditions followed.		70 %
Conditions and measures related to persona	al protection, hygiene and health evaluation	
Wear gloves providing a minimum efficiency of	(%):	80 % (EN 374)
	•	
Other conditions affecting workers exposure		
Other conditions affecting workers exposure indoor		
•		≤ 56 °C

08/08/2022 (Revision date) IE - en 152/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

` ,	ristics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or containe	d in articles), frequency an	d duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisatio	nal conditions and measure	es		
Provide a good standard of	general ventilation (not less t	han 1 to 3 air changes per hour)		
Local exhaust ventilation - e	fficiency of at least		80 %	
Supervision in place to chec correctly and operation cond		neasures in place are being used		
		ion, hygiene and health evaluation		
Wear gloves providing a mir	nimum efficiency of (%):		80 % (EN 374)	
Other conditions affecting	workers exposure			
indoor				
Maximum process temperat	ure		≤ 56 °C	
.2.8. Control of worker exp	osure: Manual activities inv	volving hand contact (PROC19)		
PROC19	Manual activities involving	hand contact		
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or containe	d in articles) frequency an	d duration of use/exposure		
Exposure duration	a manues), nequency an	≤ 8 h/day		
Technical and organisatio	nal conditions and measure	es		
Supervision in place to chec correctly and operation cond		neasures in place are being used		
Conditions and measures	related to personal protect	ion, hygiene and health evaluation		
Wear a respirator providing	a minimum efficiency of (%):		90 % (APF 10)	
Other conditions affecting	workers exposure			
indoor,and/or,Outdoor				
Maximum process temperat	ure		≤ 56 °C	
	osure: Equipment cleaning	and maintenance (PROC8a, PROC	28)	
.2.9. Control of worker exp	Joan of Equipmont Glocaling			
.2.9. Control of worker exp PROC8a	· · · · · · · · · · · · · · · · · · ·	nixture (charging and discharging) at n		
<u> </u>	Transfer of substance or m			
PROC8a	Transfer of substance or m Manual maintenance (clea	nixture (charging and discharging) at n		
PROC8a PROC28	Transfer of substance or m Manual maintenance (clea	nixture (charging and discharging) at n		
PROC8a PROC28 Product (article) character	Transfer of substance or m Manual maintenance (clea	nixture (charging and discharging) at n ning and repair) of machinery		
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	Transfer of substance or m Manual maintenance (clea istics in product	nixture (charging and discharging) at n ning and repair) of machinery Liquid ≤ 100 %		
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe	Transfer of substance or m Manual maintenance (clea istics in product	nixture (charging and discharging) at n ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure		
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day		
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	Transfer of substance or m Manual maintenance (clea ristics in product d in articles), frequency and	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	on-dedicated facilities	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec	Transfer of substance or m Manual maintenance (clean intensities) in product d in articles), frequency and nal conditions and measure controlled ventilation (5 to 10 ek that the risk management r	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day		
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation cond	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and nal conditions and measure controlled ventilation (5 to 10 k that the risk management re ditions followed.	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	on-dedicated facilities	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and nal conditions and measure controlled ventilation (5 to 10 k that the risk management re ditions followed.	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	on-dedicated facilities	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation cond Other conditions affecting indoor	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and nal conditions and measure controlled ventilation (5 to 10 k that the risk management re ditions followed. workers exposure	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	on-dedicated facilities 70 %	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation cond Other conditions affecting indoor Maximum process temperat	Transfer of substance or m Manual maintenance (clean intensities) In product In articles, frequency and Intensities and measure Controlled ventilation (5 to 10 In the that the risk management of the controlled ventilation (5 to 10 In workers exposure In workers exposure	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	on-dedicated facilities 70 % ≤ 320 °C	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation cond Other conditions affecting indoor Maximum process temperat	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and conditions and measure controlled ventilation (5 to 10 k that the risk management r ditions followed. workers exposure ure posure: Equipment cleanin	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	on-dedicated facilities 70 % ≤ 320 °C	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation conc Other conditions affecting indoor Maximum process temperat 2.10. Control of worker ex	Transfer of substance or m Manual maintenance (clean istics in product d in articles), frequency and conditions and measure controlled ventilation (5 to 10 k that the risk management relitions followed. workers exposure ure posure: Equipment cleanin Transfer of substance or m	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	on-dedicated facilities 70 % ≤ 320 °C	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation conc Other conditions affecting indoor Maximum process temperat 2.10. Control of worker ex PROC8a	Transfer of substance or m Manual maintenance (clear istics in product d in articles), frequency and conditions and measure controlled ventilation (5 to 10 ek that the risk management r ditions followed. workers exposure ure posure: Equipment cleanin Transfer of substance or m Manual maintenance (clear	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	on-dedicated facilities 70 % ≤ 320 °C	
PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.10. Control of worker ex PROC8a PROC28	Transfer of substance or m Manual maintenance (clear istics in product d in articles), frequency and conditions and measure controlled ventilation (5 to 10 ek that the risk management r ditions followed. workers exposure ure posure: Equipment cleanin Transfer of substance or m Manual maintenance (clear	nixture (charging and discharging) at no ning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	on-dedicated facilities 70 % ≤ 320 °C	

08/08/2022 (Revision date) IE - en 153/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used (or contain	ed in articles), frequ	uency and		use/exposur	е			
Exposure duration			≤ 8 h/day					
Technical and organisation	onal conditions and	d measure	es					
Supervision in place to che correctly and operation cor		agement n	neasures in pla	ice are being	used			
Conditions and measures	s related to persona	al protecti	ion, hygiene a	nd health ev	/aluation			
Wear a respirator providing	g a minimum efficiend	cy of (%):				90 % (APF 10)		
Other conditions affectin	g workers exposure	е						
indoor,and/or,Outdoor								
Maximum process tempera	ature					≤ 320 °C		
.2.11. Control of worker e	xposure: Equipmer	nt cleanin	g and mainter	nance (PROC	C8a, PROC2	8)		
PROC8a	Transfer of subst	ance or m	nixture (chargin	g and discha	rging) at nor	-dedicated	facilities	
PROC28	Manual maintena	ance (clea	ning and repair) of machine	ry			
Product (article) characte	eristics							
Physical form of product			Liquid					
Concentration of substance	e in product		≤ 100 %					
Amount used (or contain	ed in articles), freq	uency and	d duration of u	use/exposur	е			
Exposure duration			≤ 8 h/day					
Technical and organisation	onal conditions and	d measure	es					
Provide a good standard of				hanges per h	our)			
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measure correctly and operation conditions followed.				ice are being	used	80 %		
Other conditions affectin	g workers exposure	е						
indoor						< 200 °C		
Maximum process tempera						≤ 320 °C		
I.3. Exposure estima								
.3.1. Environmental releas	se and exposure Us	e in labo	,					
Release route			Release rate				ase estimation method	
Release fraction to wastew				100 % ERC				
Release to waste water fro	<u>'</u>		0 ,			ERC		
Release fraction to air from			100 %			ERC		
Release fraction to soil from	•	_	0 %	DUES	5.05	ERC		
Protection target	Unit	Exposu estimat		PNEC	RCF		Assessment method	
Freshwater	mg/l	0.881		10.6	0.08	3	EUSES v2.1.2	
Marine water	mg/l	0.083		1.06	0.07	8	EUSES v2.1.2	
Freshwater sediment	mg/kg	3.863		30.4	0.12	7	EUSES v2.1.2	
Marine water sediment	mg/kg	0.365		3.04	0.12		EUSES v2.1.2	
Sewage treatment plant	mg/l	1.327		100	0.01	3	EUSES v2.1.2	
Soil	mg/kg	0.042		29.5	0.00	1	EUSES v2.1.2	
.3.2. Worker exposure Ro	ller application or b	rushing ((PROC10)					
Route of exposure and ty of effects	ype Exposure es	stimate		RCR			Method	
Dermal - Long-term - syste	emic 27.43 mg/kg	hw/day		0.147			ECETOC TRA worker	

Acute - Local - Inhalation 1450 mg/m³ 14.3.3. Worker exposure Roller application or brushing (PROC10)

363 mg/m³

effects

Inhalation - Long-term -

systemic effects Sum RCR - Long-term -

systemic effects

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker

0.3

0.447

0.599

ECETOC TRA worker

ECETOC TRA worker

Inhalation - Long-term - systemic effects			
-	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.247	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
14.3.4. Worker exposure Roller a		10)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	000	0.347	EGETOC TDA warden
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
14.3.5. Worker exposure Use as I			1.0.0
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4 m c/m²	0.102	FORTOO TOA L
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
14.3.6. Worker exposure Manual			Matter d
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1450 mg/m³	0.452	ECETOC TRA worker
14.3.7. Worker exposure Manual			ECETOC TRA Worker
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day 242 mg/m³	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m²		
		•	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	968 ma/m³	0.352	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	968 mg/m³ activities involving hand conta	0.352	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.352	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type	activities involving hand conta	0.352 0.4 act (PROC19)	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	activities involving hand conta Exposure estimate	0.352 0.4 act (PROC19) RCR 0.76 0.1	ECETOC TRA worker Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	activities involving hand contains Exposure estimate 141.4 mg/kg bw/day 121 mg/m³	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	activities involving hand contains Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2	Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.9. Worker exposure Equipme	activities involving hand conta Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³ ent cleaning and maintenance	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2 (PROC8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	activities involving hand contains Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.9. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects	activities involving hand conta Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³ ent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2 (PROC8a, PROC28) RCR 0.074	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.9. Worker exposure Equipme Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	activities involving hand conta Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³ ent cleaning and maintenance Exposure estimate	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2 (PROC8a, PROC28) RCR 0.074 0.3	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.8. Worker exposure Manual Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 14.3.9. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	activities involving hand conta Exposure estimate 141.4 mg/kg bw/day 121 mg/m³ 484 mg/m³ ent cleaning and maintenance Exposure estimate 13.71 mg/kg bw/day	0.352 0.4 act (PROC19) RCR 0.76 0.1 0.86 0.2 (PROC8a, PROC28) RCR 0.074	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

Route of exposure and type	Exposure estimate	RCR	Method	
of effects				
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.174		
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker	
3.11. Worker exposure Equipm	nent cleaning and maintenan	ce (PROC8a, PROC28)		
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.215		
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker	
4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES	
4.1. Environment				
Guidance - Environment		No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for environment.		
4.2. Health				
Guidance - Health		No additional risk management measures, besides those that are mentioned above, are needed to		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

15. AC SE15: Uses in Coatings

Uses in Coatings	ES Ref.:	AC SE15 Association ref code: F
Uses in Coalings		e: Worker
Environment		
CS 1	Uses in Coatings	ERC8a, ERC8d
CS 2	Uses in Coatings	ERC8c, ERC8f
Worker	Cook in Coalings	Zivees, Zivees
CS 3	Use in closed process; Storage	PROC1
CS 4	Chemical production or refinery in closed continuous	PROC2
004	process with occasional controlled exposure or processes with equivalent containment conditions	11002
CS 5	Use in closed batch process (synthesis or formulation); With occasional controlled exposure	PROC3
CS 6	Chemical production where opportunity for exposure arises	PROC4
CS 7	Chemical production where opportunity for exposure arises	PROC4
CS 8	Chemical production where opportunity for exposure arises	PROC4
CS 9	Mixing or blending in batch processes	PROC5
CS 10	Mixing or blending in batch processes	PROC5
CS 11	Mixing or blending in batch processes	PROC5
CS 12	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 13	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 14	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 15	Use as laboratory reagent	PROC8b
CS 16	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 17	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 18	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	PROC9
CS 19	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	PROC9
CS 20	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	PROC9
CS 21	Roller application or brushing	PROC10
CS 22	Roller application or brushing	PROC10
CS 23	Roller application or brushing	PROC10
CS 24	Spraying	PROC11
CS 25	Spraying	PROC11
CS 26	Treatment of articles by dipping and pouring	PROC13
CS 27	Treatment of articles by dipping and pouring	PROC13
CS 28	Treatment of articles by dipping and pouring	PROC13
CS 29	Laboratory activities	PROC15
CS 30	Manual activities involving hand contact	PROC19
CS 31	Manual activities involving hand contact	PROC19
CS 32	Manual activities involving hand contact	PROC19
CS 33	Equipment cleaning and maintenance	PROC8a, PROC28
CS 34	Equipment cleaning and maintenance	PROC8a, PROC28
CS 35	Equipment cleaning and maintenance	PROC8a, PROC28

15.2. Conditions of use affecting exposure

08/08/2022 (Revision date) IE - en 157/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

ERC8a	onmental exposure: Uses in Coatings (ERC8a, ERC8d) Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)				
ERC8d	•	eactive processing aid (no inclusion into e	<u>'</u>		
		, , ,	on onto article, catagory		
	y and duration of use (or fro				
Amounts used		≤ 0.021 t/d			
	es related to sewage treatme	ent plant			
Municipal Sewage Treatm					
	es related to treatment of ward dance with environmental	ste (including article waste)			
2.2. Control of environm	nental exposure: Uses in Co	atings (ERC8c, ERC8f)			
ERC8c	Widespread use leading to inclusion into/onto article (indoor)				
ERC8f	· · · · · · · · · · · · · · · · · · ·				
Amount used frequency	y and duration of use (or fro	m service life)			
Amounts used	y and daration of ase (of he	≤ 0.021 t/d			
	es related to sewage treatme				
Municipal Sewage Treatm		on point			
	es related to treatment of ward dance with environmental	ste (including article waste)			
2.3. Control of worker e	xposure: Use in closed proc	ess; Storage (PROC1)			
PROC1	Chemical production or recontainment conditions	efinery in closed process without likelihoo	d of exposure or processes with equivalent		
Product (article) charact	teristics				
Physical form of product		Liquid			
Concentration of substance	ce in product	≤ 100 %	≤ 100 %		
Amount used (or contai	ned in articles), frequency a	nd duration of use/exposure			
Exposure duration	,	≤ 8 h/day			
•	tional conditions and measu	, IFOC			
Chemical production or rewith equivalent containment	finery in closed process witho ent conditions leck that the risk management	ut likelihood of exposure or processes measures in place are being used			
Other conditions affecti					
indoor,and/or,outdoor	ng workere expectate				
Maximum process temper	rature		≤ 56 °C		
		on or refinery in closed continuous pr	ocess with occasional controlled exposure		
	containment conditions (PR		oceas with occasional controlled exposure		
PROC2	Chemical production or rewith equivalent containment		occasional controlled exposure or processes		
Product (article) charact	teristics				
Physical form of product		Liquid			
Concentration of substance	ce in product	≤ 100 %			
Amount used (or contai	ned in articles), frequency a	nd duration of use/exposure			
Exposure duration	,,	≤ 8 h/day			
•	tional conditions and measu	IFAS			
Chemical production or re exposure or processes wi	finery in closed continuous pro th equivalent containment con eck that the risk management	ocess with occasional controlled			
Other conditions affecti	ng workers exposure				
indoor,and/or,outdoor					

08/08/2022 (Revision date) IE - en 158/265

outdoor

Maximum process temperature

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

ROC3)					
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition				
Product (article) char	acteristics				
Physical form of produ	ct	Liquid			
Concentration of subst	ance in product	≤ 100 %			
Amount used (or con	tained in articles), freque	ency and duration of use/exposur	e		
Exposure duration		≤ 8 h/day			
Technical and organi	sational conditions and r	measures			
Use in closed batch pr	ocess (synthesis or formula	ation). With occasional controlled ex	cposure		
Supervision in place to correctly and operation		ement measures in place are being	used		
Other conditions affe	cting workers exposure				
indoor,and/or,outdoor					
Maximum process tem	perature		≤ 56 °C		
.2.6. Control of worke	r exposure: Chemical pro	oduction where opportunity for ex	xposure arises (PROC4)		
PROC4	Chemical production	on where opportunity for exposure a	ırises		
Product (article) char	acteristics				
Physical form of produ	ct	Liquid			
Concentration of subst	ance in product	≤ 100 %	≤ 100 %		
Amount used (or con	tained in articles), freque	ency and duration of use/exposur	e		
Exposure duration		≤ 8 h/day			
Technical and organi	sational conditions and r	neasures			
Supervision in place to correctly and operation		ement measures in place are being	used		
Other conditions offe	cting workers exposure				

15.2.7. Control of worker exposure: Chemical production where opportunity for exposure arises (PROC4)

PROC4	Chemical production where opportunity for exposure arises		
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure			
Exposure duration		≤ 8 h/day	

≤ 56 °C

Technical and organisational conditions and measures	
Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Efficiency	30 %
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	

Other conditions affecting workers exposure	
indoor	
Maximum process temperature	≤ 56 °C

15.2.8. Control of worker exposure: Chemical production where opportunity for exposure arises (PROC4)

PROC4	Chemical production where	re opportunity for exposure arises	
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained	d in articles), frequency an	nd duration of use/exposure	
Amount used (or contained Exposure duration	d in articles), frequency and	nd duration of use/exposure ≤ 8 h/day	
`	, , ,	≤ 8 h/day	

08/08/2022 (Revision date) IE - en 159/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	Physical state. Elquid Substance type. Wono-constituent	
Local exhaust ventilation - efficiency of		80 %
Supervision in place to check that the correctly and operation conditions follows:	risk management measures in place are being used owed.	
Other conditions affecting workers	exposure	
indoor		
Maximum process temperature		≤ 56 °C
5.2.9. Control of worker exposure: M	ixing or blending in batch processes (PROC5)	
PROC5 Mixing	or blending in batch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in produc	·	
Amount used (or contained in artic	les), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
	,	
Technical and organisational condi		
correctly and operation conditions follows:	risk management measures in place are being used owed.	
	o personal protection, hygiene and health evaluation	· •
Wear a respirator providing a minimum		90 %
. , ,	,	(APF 10)
Other conditions affecting workers	exposure	
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
5.2.10. Control of worker exposure: I	Mixing or blending in batch processes (PROC5)	
PROC5 Mixing	or blending in batch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in produc	t ≤ 100 %	
Amount used (or contained in artic	les), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
·	,	
Technical and organisational cond	entilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of	· · · · · · · · · · · · · · · · · · ·	80 %
	risk management measures in place are being used	00 /0
Other conditions affecting workers	exposure	
indoor		
Maximum process temperature		≤ 56 °C
5.2.11. Control of worker exposure: I	Mixing or blending in batch processes (PROC5)	
PROC5 Mixing	or blending in batch processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in produc	t ≤ 100 %	
Amount used (or contained in artic	les), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
·	,	
Technical and organisational condi	ventilation (5 to 10 air changes per hour). Efficiency	70 %
	risk management measures in place are being used	10 %
Other conditions affecting workers	exposure	
indoor		
Maximum process temperature		≤ 56 °C
5.2.12. Control of worker exposure:	Fransfer of substance or mixture (charging and disc	harging) at non-dedicated facilities (PROC8a)

08/08/2022 (Revision date) IE - en 160/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Duadust (artiala) abarcataristica		
Product (article) characteristics	Limita	
Physical form of product	Liquid ≤ 100 %	
Concentration of substance in product		
Amount used (or contained in articles), frequency an		
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	es	
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Conditions and measures related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
5.2.13. Control of worker exposure: Transfer of substa	nce or mixture (charging and disch	arging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or n	nixture (charging and discharging) at n	on-dedicated facilities
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	·	
Provide a good standard of controlled ventilation (5 to 10	air changes per hour). Efficiency	70 %
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
5.2.14. Control of worker exposure: Transfer of substa	nce or mixture (charging and disch	arging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or n	nixture (charging and discharging) at n	on-dedicated facilities
Transfer of Substance of the		
Product (article) characteristics		
	Liquid	
Product (article) characteristics	, , , ,	
Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 %	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and	Liquid ≤ 100 % d duration of use/exposure	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure	Liquid ≤ 100 % Indicate the distribution of use/exposure ≤ 8 h/day Tess Tess Than 1 to 3 air changes per hour)	80 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of the conditions and the conditions are conditionally supplied to the conditions are conditionally supplied to the conditions are conditionally supplied to the conditional conditions are conditional conditions.	Liquid ≤ 100 % Indicate the distribution of use/exposure ≤ 8 h/day Tess Tess Than 1 to 3 air changes per hour)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed.	Liquid ≤ 100 % Indicate the distribution of use/exposure ≤ 8 h/day Tess Tess Than 1 to 3 air changes per hour)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure	Liquid ≤ 100 % Indicate the distribution of use/exposure ≤ 8 h/day Tess Tess Than 1 to 3 air changes per hour)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day Tess Ithan 1 to 3 air changes per hour) Immeasures in place are being used	80 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day Tess Ithan 1 to 3 air changes per hour) Immeasures in place are being used	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory	Liquid ≤ 100 % Indicate discrete states and the states are states and the states are s	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or responsible to the product of t	Liquid ≤ 100 % Indicate discrete states and the states are states and the states are s	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or reproduct (article) characteristics	Liquid ≤ 100 % Indicate the description of the de	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or make the product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day Tres Ithan 1 to 3 air changes per hour) Immeasures in place are being used Imperimentation of use/exposure Indicated the second of use/exposure Indicated	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of the Local exhaust ventilation - efficiency of at least supervision in place to check that the risk management of the correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or reproduct (article) characteristics Physical form of product	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day Tres Ithan 1 to 3 air changes per hour) Immeasures in place are being used Imperimentation of use/exposure Indicated the second of use/exposure Indicated	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management of correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or in Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day The set than 1 to 3 air changes per hour) Indicated that 1 to 3 air changes per hour) Indicated that 1 to 3 air changes per hour) Indicated that 1 to 3 air changes per hour) Indicated that 2 to 3 air changes per hour)	80 % ≤ 56 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less of Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.15. Control of worker exposure: Use as laboratory PROC8b Transfer of substance or response form of product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and	Liquid ≤ 100 % Indicated duration of use/exposure ≤ 8 h/day Indicated duration of use/exposure ≤ 8 h/day Indicated duration of use/exposure Indicated duration of use/exposure ≤ 8 h/day Indicated duration of use/exposure ≤ 8 h/day Indicated duration of use/exposure ≤ 8 h/day	80 % ≤ 56 °C

08/08/2022 (Revision date) IE - en 161/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Supervision in place to check that the correctly and operation conditions follows:		easures in place are being used	
Other conditions affecting workers			
indoor	exposure		
Maximum process temperature			≤ 56 °C
15.2.16. Control of worker exposure: 1	Fransfer of substance	ce or mixture (charging and discharg	ging) at dedicated facilities (PROC8b)
· · · · · · · · · · · · · · · · · · ·		kture (charging and discharging) at ded	
Product (article) characteristics		, , , , , , , , , , , , , , , , , , , ,	
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in artic		duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisational condi		•	
Supervision in place to check that the			
correctly and operation conditions follo	•	casares in place are sering asea	
Other conditions affecting workers	exposure		
outdoor			
Maximum process temperature			≤ 56 °C
15.2.17. Control of worker exposure: 1	Transfer of substand	ce or mixture (charging and discharg	ging) at dedicated facilities (PROC8b)
PROC8b Transfe	er of substance or mix	cture (charging and discharging) at ded	licated facilities
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in product	t :	≤ 100 %	
Amount used (or contained in artic	les), frequency and	duration of use/exposure	
Exposure duration	:	≤ 8 h/day	
Technical and organisational condi	itions and measures	\$	
Provide a good standard of general ve	entilation (not less tha	an 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of	of at least		90 % Inhalation
Local exhaust ventilation - efficiency of	of at least		80 %
Companision in place to all that the			Dermal
Supervision in place to check that the correctly and operation conditions follows:		easures in place are being used	
Other conditions affecting workers			
indoor			
Maximum process temperature			≤ 56 °C
	ransfer of substand	ce or mixture into small containers (dedicated filling line, including weighing)
PROC9 Transfe	or of aubatanaa or pro	proretion into amall containers (dedicate	ad filling line, including weighing)
	or substance or pre	eparation into small containers (dedicate	ca ming ine, including weighing)
Product (article) characteristics		Limited	
Physical form of product Concentration of substance in product		Liquid ≤ 100 %	
Amount used (or contained in artic		•	
Exposure duration		≤ 8 h/day	
Technical and organisational condi			
Supervision in place to check that the correctly and operation conditions follows:		easures in place are being used	
Other conditions affecting workers	exposure		
outdoor			. 50.00
Maximum process temperature	F		≤ 56 °C
PROC9)			dedicated filling line, including weighing)
PROC9 Transfe	er of substance or pre	eparation into small containers (dedicate	ed filling line, including weighing)

08/08/2022 (Revision date) IE - en 162/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	roe	
Provide a good standard of general ventilation (not less		30 %
Efficiency		00 /0
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
5.2.20. Control of worker exposure: Transfer of substa	ance or mixture into small containers	s (dedicated filling line, including weighing)
PROC9)		3 0 10 3 3
PROC9 Transfer of substance or p	preparation into small containers (dedic	cated filling line, including weighing)
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency ar	nd duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measur	res	
Provide a good standard of general ventilation (not less	than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		80 %
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
5.2.21. Control of worker exposure: Roller application	or brushing (PROC10)	
DDOC10 Dallar application LL	•	
PROC10 Roller application or brush	ning	
Product (article) characteristics	ning	
	Liquid	
Product (article) characteristics	·	
Product (article) characteristics Physical form of product	Liquid ≤ 100 %	
Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 %	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration	Liquid ≤ 100 % and duration of use/exposure ≤ 8 h/day res	70 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day res 0 air changes per hour). Efficiency	70 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed.	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day res 0 air changes per hour). Efficiency	70 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day res 0 air changes per hour). Efficiency	70 %
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day res 0 air changes per hour). Efficiency	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	Liquid ≤ 100 % Indicate of use/exposure ≤ 8 h/day res D air changes per hour). Efficiency measures in place are being used	70 % ≤ 375 °C
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res Dair changes per hour). Efficiency measures in place are being used or brushing (PROC10)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res Dair changes per hour). Efficiency measures in place are being used or brushing (PROC10)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics	Liquid ≤ 100 % Indicate of use/exposure ≤ 8 h/day Indicate of use/exposure ≤ 8 h/day Indicate of use/exposure Solution of use/exposure Solutio	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day res Dair changes per hour). Efficiency measures in place are being used or brushing (PROC10)	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product Concentration of substance in product	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day Indexidual street of the stre	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are	Liquid ≤ 100 % Indicate of use/exposure ≤ 8 h/day Indicate of use/exposure Solution of use/exposure Indicate of use/exposure	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day Indexidual of use/exposure Solution of use/exposure Indexidual of use/exposure	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day Ind duration of use/exposure So air changes per hour). Efficiency measures in place are being used Ind duration of use/exposure So air changes per hour). Efficiency measures in place are being used Ind by the duration of use/exposure So and duration of use/exposure So ahd duration of use/exposure So ahd duration of use/exposure	
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration Technical and organisational conditions and measure Provide a good standard of controlled ventilation (5 to 10 Supervision in place to check that the risk management correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5.2.22. Control of worker exposure: Roller application PROC10 Roller application or brush Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency are Exposure duration	Liquid ≤ 100 % Ind duration of use/exposure ≤ 8 h/day Ind duration of use/exposure So air changes per hour). Efficiency measures in place are being used Ind duration of use/exposure So air changes per hour). Efficiency measures in place are being used Ind by the duration of use/exposure So and duration of use/exposure So ahd duration of use/exposure So ahd duration of use/exposure	

08/08/2022 (Revision date) IE - en 163/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers exposure	<u> </u>	
indoor	#	
Maximum process temperature		≤ 375 °C
.2.23. Control of worker exposure: Roller app	plication or brushing (PROC10)	23/3 0
PROC10 Roller application		
• • • • • • • • • • • • • • • • • • • •		
Product (article) characteristics Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
<u>'</u>		
Amount used (or contained in articles), frequ	•	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and		
Supervision in place to check that the risk mana correctly and operation conditions followed.	agement measures in place are being used	
Conditions and measures related to persona	al protection, hygiene and health evaluat	ion
Wear a respirator providing a minimum efficience		90 %
· · · · -		(APF 10)
Other conditions affecting workers exposure	9	
indoor,and/or,outdoor		
Maximum process temperature		≤ 375 °C
.2.24. Control of worker exposure: Spraying		
PROC11 Non industrial sp	raying	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequ		
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minute)		
Technical and organisational conditions and		
Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least Surface spraying of liquids. Spraying with no or	low compressed air use	80 %
Ensure that direction of application is only horiz	<u>'</u>	
Supervision in place to check that the risk mana		
correctly and operation conditions followed.	,	
Other conditions affecting workers exposure	Ð	
Indoors,Assumes large workrooms		
Maximum process temperature		≤ 56 °C
.2.25. Control of worker exposure: Spraying		
PROC11 Non industrial sp	raying	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequ	uency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and	I measures	
Surface spraying of liquids. Moderate application application is only horizontal or downward. Spra Supervision in place to check that the risk manacorrectly and operation conditions followed.	aying with no or low compressed air use	on of
Conditions and measures related to persona	al protection, hygiene and health evaluat	ion
Wear a respirator providing a minimum efficience		90 %
a roophator providing a Hillillillilli billobil	·, ·· (/U)·	(APF 10)

08/08/2022 (Revision date) IE - en 164/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Wear gloves providing a min	imum efficiency of (%):		80 % (EN 374)
Other conditions affecting	workers exposure		(2.1.5.1)
Indoors,Assumes large work	· ·	e to buildings (< 4 m)	
Maximum process temperatu	ıre	<u> </u>	≤ 56 °C
15.2.26. Control of worker exp	oosure: Treatment of article	es by dipping and pouring (PROC13)
PROC13	Treatment of articles by dip	oping and pouring	
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	· ≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	•	
Provide a good standard of g	general ventilation (not less t	han 3 to 5 air changes per hour). neasures in place are being used	30 %
Other conditions affecting			
indoor	•		
Maximum process temperatu	ıre		≤ 56 °C
15.2.27. Control of worker exp	oosure: Treatment of article	es by dipping and pouring (PROC13	
PROC13	Treatment of articles by dip	oping and pouring	
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	9	
-		han 1 to 3 air changes per hour)	
Local exhaust ventilation - ef Supervision in place to check	fficiency of at least k that the risk management r	neasures in place are being used	80 %
correctly and operation cond			
Other conditions affecting indoor	workers exposure		
Maximum process temperatu	IΓΩ		≤ 56 °C
		es by dipping and pouring (PROC13	
PROC13	Treatment of articles by di		,
		sping and pouning	
Product (article) characteri Physical form of product	ISHUS	Liquid	
Concentration of substance i	in product	⊆iquid ≤ 100 %	
	·		
	a in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation			
correctly and operation cond	itions followed.	neasures in place are being used	
Other conditions affecting	workers exposure		
outdoor			∠ 50°C
Maximum process temperatu		00 (BB0C15)	≤ 56 °C
15.2.29. Control of worker exp		es (PROC15)	
PROC15	Use as laboratory reagent		
Product (article) characteri	istics		
Physical form of product	to a select	Liquid	
Concentration of substance i	in product	≤ 100 %	

165/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisational conditions and m	neasures	
Supervision in place to check that the risk manage correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature		≤ 56 °C
2.30. Control of worker exposure: Manual activ	vities involving hand contact (PROC19)	
PROC19 Manual activities inv	volving hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequer	ncy and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and m	neasures	
Provide a good standard of general ventilation (no		
Local exhaust ventilation - efficiency of at least	U -11 /	80 %
Supervision in place to check that the risk manage correctly and operation conditions followed.	ement measures in place are being used	
Conditions and measures related to personal p	protection, hygiene and health evaluation	
Wear gloves providing a minimum efficiency of (%):	80 % (EN 374)
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
2.31. Control of worker exposure: Manual activ	<u> </u>	
PROC19 Manual activities inv	volving hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequen	ncy and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and m	neasures	
Provide a good standard of controlled ventilation (Supervision in place to check that the risk manage correctly and operation conditions followed.		70 %
Conditions and measures related to personal p	protection, hygiene and health evaluation	
Wear gloves providing a minimum efficiency of (%):	80 % (EN 374)
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
2.32. Control of worker exposure: Manual activ	rities involving hand contact (PROC19)	
PROC19 Manual activities inv	olving hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequer	ncy and duration of use/exposure	
, , , , , , , , , , , , , , , , , , , ,	≤ 8 h/day	
Exposure duration		
Exposure duration Technical and organisational conditions and m	noacuroc	

08/08/2022 (Revision date) IE - en 166/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Wear a respirator providing a minimum efficiency of (%): (APF 10) Other conditions affecting workers exposure index and provided in the prov	Conditions and measures r	elated to personal protect	ion, hygiene and health evaluation	
Other conditions affecting workers exposure Indoor, and/or, Outdoor Maximum process temperature 5.63.53. Control of worker exposures Equipment cleaning and maintenance (PROC88), PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product Liquid Concentration of substance in product Exposure duration 5.8 N/day Technical and organisational conditions and measures Provide a good standard of controlled vertilation (5 to 10 air changes per hour). Efficiency 70 % Supervision in place to check that the risk management measures in place are being used correctly and opportunition conditions and measures PROC28 Manual maintenance (cleaning and maintenance (PROC88), PROC28) Product (article) characteristics Pr		•	,, 9	90 %
Indoor and/or Outdoor Maximum process temperature ≤56 °C \$233\$ Control of Worker exposure: Equipment cleaning and maintenance (PROC8s, PROC2s) PROC2s Manual maintenance (seaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency 70 % Supervision in place to check that the risk management measures in place are being used correctly and operation conditions efficiency and duration of the repair of machinery PROC2s Maximum process temperature ≤ 55 °C \$23.42 Control of worker exposures: Equipment deaning and maintenance (PROC8a, PROC2s) PROC2s Manual maintenance (cleaning and tenain) and discharging) at non-dedicated facilities PROC2s Manual maintenance (cleaning and tenain) and discharging) at non-dedicated facilities PROC2s Manual maintenance (cleaning and tenain) and discharging) at non-dedicated facilities PROC2s Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): (APF 10) Other conditions affecting workers exposure: Equipment of product Liquid Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of usefexposure Face of the product of t				(APF 10)
Maximum process temperature \$56 °C	Other conditions affecting	workers exposure		
5.2.53. Control of worker exposures Equipment cleaning and maintenance (PROC8a PROC26 Transfer of substance or mixture (charping and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 briday Technical and organisational conditions and measures Provide a good standard of controlled ventilation (6 to 10 air changes per hour). Efficiency 70 % Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure Indoor Maximum process temperature \$ 56 °C \$ 2.3.4. Control of worker exposures Equipment cleaning and maintenance (PROC8a, PROC8a) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical from of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): Query since in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation. Wear a respirator providing a minimum efficiency of (%): Query since the place to check that the risk management measures in place are being used correctly and operation conditions affecting workers exposure. Equ				
PROC28				
PROC28			<u> </u>	
Product (article) characteristics Physical form of product Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 N day Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 sir changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting worker exposure Indoor Maximum process temperature \$ 56 °C \$ 23.34. Control of worker exposure. Equipment cleaning and maintenance (PROC8a, PROC28) PROC2a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC2b Product (article) characteristics Physical form of product Concentration of substance in product Exposure duration \$ 8 N day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wera respirator providing a minimum efficiency of (%): (APF 10) Other conditions affecting workers exposure Indoor, and/or, Cutdoor Maximum process temperature \$ 56 °C \$ 3.33.5. Control of worker exposures: Equipment cleaning and maintenance (PROC8a, PROC28) PROC28 Menual maintenance (cleaning and epair) of machinery Product (article) characteristics Physical from of product Liquid Concentration of substance in product \$ 56 °C \$ 3.33.5. Control of worker exposures: Equipment cleaning and maintenance (PROC8a, PROC28) Menual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical from of product Liquid Concentration of substance in product \$ 500 % Substance in product \$ 5 6 °C \$ 3.33.5. Control of worker exposures: Equipment cleaning and maintenance (PROC8a, PROC28) Product (article) characteris			, , , , , , , , , , , , , , , , , , , ,	on-dedicated facilities
Physical form of product Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration Formitian and organisational conditions and measures Frovide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Cither conditions affecting workers exposure Indoor Maximum process temperature FROC8a Fronder good post and the content of the conte		,	ining and repair) of machinery	
Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency 70 %. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure Indoor Maximum process temperature ≤ 56 °C S2.24. Control of worker exposure: Equipment cleaning and maintenance (PROC68, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Product (article) characteristics Physical form of product Concentration of substance in product Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure Indoor, and/or, Outdoor Maximum process temperature ≤ 56 °C S2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC68, PROC28) PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Product (article) characteristics Physical form of product S 100 % Amount used for contained in product S 100 % Amount used or contained in product S 100 % Amount used or cont	• •	stics		
Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 6 N'day Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in piace to check that the risk management measures in place are being used cornectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature \$ 256 °C \$ 2.34. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC2a) PROC2a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC2b Product (article) characteristics Provide a good standard or contained in articles), frequency and duration of use/exposure Exposure duration \$ 18 h'day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used cornectly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10) Other conditions affecting workers exposure Indoor, and/or, Outdoor Maximum process temperature \$ 56 °C \$ 2.32.5. Control of workers exposure: Equipment cleaning and maintenance (PROC8a, PROC2a) Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 h'day Technical and organisational conditions and measures \$ 8 h'day Technical and organisational conditions and measures \$ 8 h'day Technical and organisational conditions and measures in place are being used cornectly and operation corditions followed. Other condi	•		•	
Exposure duration \$ 8 h/day Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 5 26 °C 52.24. Control of worker exposures. Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC2B Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 100 % Conditions and measures related to personal protection, hyglene and health evaluation Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor, and/or, Dudoor Waximum process temperature 5 56 °C 52.35. Control of worker exposures Equipment cleaning and maintenance (PROC8a, PROC28) PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration = 16 ficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions and measures Indoor in the process of the product of	Concentration of substance in	n product	≤ 100 %	
Technical and organisational conditions and measures Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature \$ 58 °C \$ 2.2.3. Control of worker exposures. Equipment cleaning and maintenance (PROC8s, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10) Other conditions affecting workers exposure Indoor, and/or, Outdoor Maximum process temperature \$ 56 °C \$ 2.3.5. Control of worker exposure: Equipment cleaning and maintenance (PROC8s), PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product \$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	Amount used (or contained	I in articles), frequency an	d duration of use/exposure	
Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly, and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	Exposure duration		≤ 8 h/day	
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	Technical and organisation	al conditions and measur	es	
Indoor Maximum process temperature ≤ 58 °C 5.2.34. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC2B Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$\frac{1}{2}\$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$\frac{2}{2}\$ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): (APF 10) Other conditions affecting workers exposure indoor, and/or,Outdoor Maximum process temperature \$\frac{2}{2}\$\$. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC2a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Product (article) characteristics Physical form of product Liquid Concentration of substance in product \$\frac{1}{2}\$\$ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration \$\frac{2}{2}\$\$ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions and measures Indoor of the conditions affecting workers exposure indoor.	Supervision in place to check	that the risk management r	0 1 , ,	70 %
Maximum process temperature ≤ 56 °C 5.2.3.4. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC2B Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10) Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions affecting workers exposure indoor	Other conditions affecting	workers exposure		
FAC.24. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC28 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10) Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Other conditions affecting workers exposure indoor				
PROC88 Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical from of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10) Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation = efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor				
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Product (article) characteristics Physical form of product			(0 0	on-dedicated facilities
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Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature \$ 56 °C \$ 2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Exposure duration		≤ 8 h/day	
Conditions and measures related to personal protection, hygiene and health evaluation Wear a respirator providing a minimum efficiency of (%): Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature 5 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Technical and organisation	al conditions and measur	es	
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Other conditions affecting workers exposure indoor, and/or, Outdoor Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC3a, PROC28) PROC8a PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor		•	ion, hygiene and health evaluation	
indoor,and/or,Outdoor Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ■ ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Wear a respirator providing a	minimum efficiency of (%):		
Maximum process temperature ≤ 56 °C 5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least 80 % Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Other conditions affecting	workers exposure		
5.2.35. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	indoor,and/or,Outdoor			
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor				
PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor				
Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor			, , , , , , , , , , , , , , , , , , , ,	on-dedicated facilities
Physical form of product Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	PROC28	ıvıanuai maintenance (clea	ining and repair) of machinery	
Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	• •	stics		
Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least 80 % Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	, ,		•	
Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Concentration of substance i	n product	≤ 100 %	
Technical and organisational conditions and measures Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Amount used (or contained	l in articles), frequency an		
Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Exposure duration		≤ 8 h/day	
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	Technical and organisation	al conditions and measur	es	
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure indoor	0	`	han 1 to 3 air changes per hour)	
Other conditions affecting workers exposure indoor	Supervision in place to check	that the risk management r	measures in place are being used	80 %
indoor				
		Hornera exposure		
		ıre		≤ 56 °C
	p. 00000 tomporate	-		

08/08/2022 (Revision date) IE - en 167/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

15.3. Exposure estimation and reference to its source

15.3.1, Environmental release and exposure Uses in Coatings (ERC8a, EF	(C8d)
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Release fraction to wastewater 100 % ERC	
Release to waste water from process 21.32 kg/day ERC	
Release fraction to air from process 100 % ERC	
Release fraction to soil from process 20 % ERC	

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.881	10.6	0.083	EUSES v2.1.2
Marine water	mg/l	0.083	1.06	0.078	EUSES v2.1.2
Freshwater sediment	mg/kg	3.863	30.4	0.127	EUSES v2.1.2
Marine water sediment	mg/kg	0.365	3.04	0.12	EUSES v2.1.2
Sewage treatment plant	mg/l	1.327	100	0.013	EUSES v2.1.2
Soil	mg/kg	0.042	29.5	0.001	EUSES v2.1.2

15.3.2. Environmental release and exposure Uses in Coatings (ERC8c, ERC8f)

Release route	Release rate	Release estimation method
Release fraction to wastewater	30 %	Worst case assumption
Release to waste water from process	6.395 kg/day	Worst case assumption
Release fraction to air from process	15 %	ERC
Release fraction to soil from process	0.5 %	ERC

				_	
Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.788	10.6	0.074	EUSES v2.1.2
Marine water	mg/l	0.074	1.06	0.07	EUSES v2.1.2
Freshwater sediment	mg/kg	3.455	30.4	0.114	EUSES v2.1.2
Marine water sediment	mg/kg	0.324	3.04	0.107	EUSES v2.1.2
Sewage treatment plant	mg/l	0.398	100	0.004	EUSES v2.1.2
Soil	mg/kg	0.029	29.5	0.001	EUSES v2.1.2

15.3.3. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m ³	0	ECETOC TRA worker

15.3.4. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

15.3.5. Worker exposure Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 168/265

5.3.6. Worker exposure Chemica	l production where opportunity for	exposure arises (PROC4)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
<u> </u>	I production where opportunity for	<u> </u>	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.387	ECETOC TRA worker
	I production where opportunity for		ECETOC TRA WOIKEI
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects Inhalation - Long-term -	6.86 mg/kg bw/day	0.037	ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term -	121 mg/m²	0.137	ECETOC TRA WOIKEI
systemic effects Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	r blending in batch processes (PRC	-	202100 Trot Worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.115	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
	or blending in batch processes (PR		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	000	0.215	FOFTOO TDA
Acute - Local - Inhalation	968 mg/m ³ or blending in batch processes (PR	0.4	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
5.3.12. Worker exposure Transfe	r of substance or mixture (charging	and discharging) at non-dedicated	facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
	121 mg/m³	0.1	ECETOC TRA worker

Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.13. Worker exposure Transfe		arging and discharging) at	non-dedicated facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4.450 / 2	0.374	FORTOO TDA worden
Acute - Local - Inhalation 3 14 Worker exposure Transfe	1450 mg/m ³	0.599	ECETOC TRA worker non-dedicated facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
3.15. Worker exposure Use as Route of exposure and type	Exposure estimate	RCR	Method
of effects		NON	Wethod
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.424	ECETOC TRA worker
3.16. Worker exposure Transfe			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1000/2	0.424	FOFTOO TRA
Acute - Local - Inhalation	1690 mg/m³	0.698	dedicated facilities (PROC8b)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040	0.065	FOFTCO TDA
Acute - Local - Inhalation 3.18. Worker exposure Transfe	242 mg/m ³ or of substance or mixture into	0.1 small containers (dedicat	ECETOC TRA worker sed filling line, including weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000	0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker sed filling line, including weighing) (PROC9)
3.19. Worker exposure Transfe Route of exposure and type	Exposure estimate	RCR	Method
of effects Dermal - Long-term - systemic	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
effects	0.00 mg/kg bw/day	0.037	ECETOC TRA WOIKEI

Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
.3.20. Worker exposure Transfe		Il containers (dedicated filling line, i	ncluding weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.372 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4/2	0.107	FOFTOO TDAadica
Acute - Local - Inhalation	484 mg/m³ application or brushing (PROC10)	0.2	ECETOC TRA worker
		-	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1450 mg/m³	0.447	ECETOC TRA worker
	application or brushing (PROC10)	0.000	LOCIOO INA WOIKEI
		DCD	Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	242 mg/m³	0.2	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
	application or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects			
	104	0.247	FOSTOO TDA
Acute - Local - Inhalation	484 mg/m³	0.247	ECETOC TRA worker
			ECETOC TRA worker Method
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic	ng (PROC11)	0.2	
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	ng (PROC11) Exposure estimate	0.2	Method
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³	0.2 RCR 0.576 0.005 0.581	Method ECETOC TRA worker Used ART model (v1.5)
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³	0.2 RCR 0.576 0.005	Method ECETOC TRA worker
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.25. Worker exposure Sprayir	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³ ng (PROC11)	0.2 RCR 0.576 0.005 0.581 0.802	Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.25. Worker exposure Sprayir Route of exposure and type of effects	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³	0.2 RCR 0.576 0.005 0.581	Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.25. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³ ng (PROC11) Exposure estimate 21.43 mg/kg bw/day	0.2 RCR 0.576 0.005 0.581 0.802 RCR 0.115	Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.25. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³ ng (PROC11) Exposure estimate	0.2 RCR 0.576 0.005 0.581 0.802 RCR 0.115 0.826	Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method
Acute - Local - Inhalation 3.24. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.25. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³ ng (PROC11) Exposure estimate 21.43 mg/kg bw/day	0.2 RCR 0.576 0.005 0.581 0.802 RCR 0.115	Method ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker

3.26. Worker exposure Treatm		· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.27. Worker exposure Treatm			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4	0.115	ECETOO TRAdaa
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.28. Worker exposure Treatm			W.A. I
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000	0.424	ECETOC TRAd.a.
Acute - Local - Inhalation 3.29. Worker exposure Labora	1690 mg/m³	0.698	ECETOC TRA worker
<u> </u>		BOR	Mathead
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.34 mg/kg bw/day	0.002	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	121 mg/m³	0.102	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	484 mg/m³	0.702	ECETOC TRA worker
3.30. Worker exposure Manual			EGET GO TTO CWGING!
Route of exposure and type	Exposure estimate	RCR	Method
of effects			
Dermal - Long-term - systemic effects Inhalation - Long-term -	28.29 mg/kg bw/day 242 mg/m ³	0.152	ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term -	242 mg/m	0.352	LOCITOO TRA WORKER
systemic effects Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
3.31. Worker exposure Manual			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.452	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
3.32. Worker exposure Manual	activities involving hand con	tact (PROC19)	
D	Exposure estimate	RCR	Method
Route of exposure and type of effects			
	141.4 mg/kg bw/day	0.76	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.86	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.33. Worker exposure Equipm	. 5		EGET GO TTO CHICKOT
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term -		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
3.34. Worker exposure Equipm	nent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.35. Worker exposure Equipm	nent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
nhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES
1.1. Environment			
Guidance - Environment	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for environment.		
1.2. Health			
Guidance - Health	No additional risk mana		ose that are mentioned above, are needed to

173/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

16. AC SE16: Use as binders and release agents

Use as binders and release agents		ES Ref.: /		Association ref code: P
		ESType	e: Worker	
Environment				
CS 1	Use as binders and release ager	nts	ERC8a, ERC8d	
CS 2	Use as binders and release agents		ERC8b, ERC8e	
CS 3	Use as binders and release agents		ERC8c, ERC8f	
Worker				
CS 4	Use in closed process; Storage		PROC1	
CS 5	process with occasional controlle	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions		
CS 6	Use in closed batch process (syr With occasional controlled expos		PROC3	
CS 7	Chemical production where opporarises	ortunity for exposure	PROC4	
CS 8	Chemical production where opporarises			
CS 9	Chemical production where opportunity for exposure arises		PROC4	
CS 10	Mixing or blending in batch processes		PROC5	
CS 11	Mixing or blending in batch processes		PROC5	
CS 12	Mixing or blending in batch processes		PROC5	
CS 13	Calendering (including Banburys)		PROC6	
CS 14	Calendering (including Banburys)		PROC6	
CS 15	Calendering (including Banburys	Calendering (including Banburys)		
CS 16		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		
CS 17		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		
CS 18		Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		
CS 19		Transfer of substance or mixture (charging and discharging) at dedicated facilities		
CS 20		Transfer of substance or mixture (charging and discharging) at dedicated facilities		
CS 21	discharging) at dedicated facilitie	Transfer of substance or mixture (charging and discharging) at dedicated facilities		
CS 22	(dedicated filling line, including w	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)		
CS 23	(dedicated filling line, including w	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)		
CS 24	(dedicated filling line, including w	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)		
CS 25		Roller application or brushing		
CS 26	Roller application or brushing	Roller application or brushing		
CS 27	Roller application or brushing	Roller application or brushing		
CS 28	Spraying		PROC11	
CS 29	Spraying		PROC11	
CS 30	Equipment cleaning and mainter	ance	PROC8a, PROC2	
CS 31	Equipment cleaning and mainter	ance	PROC8a, PROC28	
CS 32	Equipment cleaning and maintenance		PROC8a, PROC2	28

10.2. Conditions of use affecting exposure	16.2.	Conditions of	f use affecting exposure
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1	6.2.1. Control of environmen	tal exposure: Use as binders and release agents (ERC8a, ERC8d)
	ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

08/08/2022 (Revision date) IE - en 174/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

ERC8d	Widespread use of non-re	eactive processing aid (no inclusion into	or onto article, outdoor)
Amount used, frequency a	nd duration of use (or froi	m service life)	
Amounts used		≤ 0.021 t/d	
Conditions and measures	related to sewage treatme	nt plant	
Municipal Sewage Treatmen	t Plant		
Conditions and measures	related to treatment of wa	ste (including article waste)	
Dispose of waste in accorda			
legislation			
	· · · · · · · · · · · · · · · · · · ·	lers and release agents (ERC8b, ERC	
ERC8b		e processing aid (no inclusion into or or	· '
ERC8e	·	e processing aid (no inclusion into or or	nto article, outdoor)
Amount used, frequency a	nd duration of use (or froi	•	
Amounts used		≤ 0.021 t/d	
Conditions and measures		nt plant	
Municipal Sewage Treatmen			
		ste (including article waste)	
Dispose of waste in accordar legislation	nce with environmental		
	tal exposure: Use as bino	lers and release agents (ERC8c, ERC	8f)
ERC8c		o inclusion into/onto article (indoor)	
ERC8f	Widespread use leading t	o inclusion into/onto article (outdoor)	
Amount used, frequency a	nd duration of use (or fro	m service life)	
Amounts used		≤ 0.021 t/d	
Conditions and measures	related to sewage treatme	nt plant	
Municipal Sewage Treatmen	t Plant		
Conditions and measures	related to treatment of wa	ste (including article waste)	
Dispose of waste in accorda			
legislation			
.2.4. Control of worker expo			
PROC1	Chemical production or re containment conditions	finery in closed process without likelihoo	od of exposure or processes with equivalent
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	d in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measu	res	
•	,	ut likelihood of exposure or processes	
with equivalent containment		measures in place are being used	
correctly and operation cond		modeline in place are being accu	
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperatu	ıre		≤ 56 °C
i.2.5. Control of worker expo ocesses with equivalent co			rocess with occasional controlled exposure of
PROC2	Chemical production or rewith equivalent containment	•	n occasional controlled exposure or processes
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	d in articles), frequency ar	nd duration of use/exposure	
•		< 9 h/dov	
Exposure duration		≤ 8 h/day	

08/08/2022 (Revision date) IE - en 175/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organis	ational conditions and meas	sures	
		process with occasional controlled	
	•	onditions nt measures in place are being used	
	ting workers exposure		
indoor,and/or,outdoor			
Maximum process temp	erature		≤ 56 °C
.2.6. Control of worker ROC3)	exposure: Use in closed bat	ch process (synthesis or formulation)	; With occasional controlled exposure
PROC3		tion in the chemical industry in closed bat alent containment condition	ch processes with occasional controlled exposu
Product (article) chara	cteristics		
Physical form of produc		Liquid	
Concentration of substa			
Amount used (or cont	nined in articles) frequency	and duration of use/exposure	
Exposure duration	amou m artiology, moquomoy	≤ 8 h/day	
Technical and organis	ational conditions and meas	sures	
Use in closed batch pro	cess (synthesis or formulation)	. With occasional controlled exposure	
Supervision in place to correctly and operation	•	nt measures in place are being used	
	ting workers exposure		
indoor,and/or,outdoor	•		
Maximum process temperature			≤ 56 °C
2.7. Control of worker	exposure: Chemical produc	tion where opportunity for exposure a	rises (PROC4)
PROC4	Chemical production wh	nere opportunity for exposure arises	
Product (article) chara	cteristics		
Physical form of produc		Liquid	
Concentration of substance in product ≤ 100 %			
	•		
•	ained in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
-	ational conditions and meas check that the risk managemer	sures nt measures in place are being used	
correctly and operation		, ,	
	ting workers exposure		
outdoor Maximum process tomr	oroturo		≤ 56 °C
Maximum process temp		tion where consent with for own course	
PROC4		tion where opportunity for exposure a nere opportunity for exposure arises	rises (PROC4)
		iere opportunity for exposure anses	
Product (article) chara			
Physical form of produc		Liquid	
Concentration of substa	nce in product	≤ 100 %	
Amount used (or cont	ained in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organis	ational conditions and meas	sures	
Efficiency Supervision in place to	check that the risk managemer	s than 3 to 5 air changes per hour). nt measures in place are being used	30 %
correctly and operation			
	ting workers exposure		
indoor Manianus anna anna anna anna			×50.00
Maximum process temp			≤ 56 °C
		tion where opportunity for exposure a	nses (PRUC4)
PROC4	Unemical production wh	nere opportunity for exposure arises	

176/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product		
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Provide a good standard of general ventilation (not less t	han 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least		80 %
Supervision in place to check that the risk management r correctly and operation conditions followed.	neasures in place are being used	
Other conditions affecting workers exposure		
indoor		
Maximum process temperature		≤ 56 °C
6.2.10. Control of worker exposure: Mixing or blending	<u> </u>	
PROC5 Mixing or blending in batch	processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency an	d duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	es	
Supervision in place to check that the risk management r correctly and operation conditions followed.		
Conditions and measures related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
6.2.11. Control of worker exposure: Mixing or blending	in batch processes (PROC5)	
PROC5 Mixing or blending in batch	processes	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
	d duration of was/avacoura	
Amount used (or contained in articles), frequency an	u duration of use/exposure	
Amount used (or contained in articles), frequency an Exposure duration	≤ 8 h/day	
	≤ 8 h/day	
Exposure duration	≤ 8 h/day es	
Exposure duration Technical and organisational conditions and measure	≤ 8 h/day es	80 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less t	≤ 8 h/day es han 1 to 3 air changes per hour)	80 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less t Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management r	≤ 8 h/day es han 1 to 3 air changes per hour)	80 %
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed.	≤ 8 h/day es han 1 to 3 air changes per hour)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used	80 % ≤ 56 °C
Exposure duration Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5)	
Exposure duration Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5)	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5)	
Exposure duration Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch Product (article) characteristics	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5) n processes	
Exposure duration Technical and organisational conditions and measure Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch Product (article) characteristics Physical form of product	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5) n processes Liquid ≤ 100 %	
Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch Product (article) characteristics Physical form of product Concentration of substance in product	≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5) n processes Liquid ≤ 100 %	
Exposure duration Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management in correctly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency an Exposure duration	es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5) n processes Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Exposure duration Technical and organisational conditions and measure. Provide a good standard of general ventilation (not less to Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management recorrectly and operation conditions followed. Other conditions affecting workers exposure indoor Maximum process temperature 6.2.12. Control of worker exposure: Mixing or blending PROC5 Mixing or blending in batch Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in articles), frequency and	es han 1 to 3 air changes per hour) measures in place are being used in batch processes (PROC5) n processes Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	

08/08/2022 (Revision date) IE - en 177/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
.2.13. Control of worker exposure: Calendering (inc	luding Banburys) (PROC6)			
PROC6 Calendering operations				
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency	and duration of use/exposure			
Exposure duration ≤ 8 h/day				
·	,			
Technical and organisational conditions and meas Local exhaust ventilation - efficiency of at least	ures	80		
Supervision in place to check that the risk managemen correctly and operation conditions followed.	60			
Conditions and measures related to personal prote	ection, hygiene and health evaluation			
Wear a respirator providing a minimum efficiency of (%	5):	90 %		
		(APF 10)		
Other conditions affecting workers exposure				
indoor,and/or,outdoor		4.50.00		
Maximum process temperature		≤ 56 °C		
.2.14. Control of worker exposure: Calendering (inc	luding Banburys) (PROC6)			
3 4				
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency a	and duration of use/exposure			
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and meas	ures			
Provide a good standard of controlled ventilation (5 to Supervision in place to check that the risk managemen correctly and operation conditions followed.		70 %		
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
.2.15. Control of worker exposure: Calendering (inc	luding Banburys) (PROC6)			
PROC6 Calendering operations				
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency a	and duration of use/exposure			
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and meas	ures			
Provide a good standard of general ventilation (not less				
Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk managemen correctly and operation conditions followed.	<u> </u>	80 %		
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
.2.16. Control of worker exposure: Transfer of subs	tance or mixture (charging and disch	arging) at non-dedicated facilities (PROC8a)		
PROC8a Transfer of substance or	r mixture (charging and discharging) at r	on dedicated facilities		

178/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

are being used health evaluation
are being used I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
are being used I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
are being used I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
I health evaluation 90 % (APF 10) ≤ 56 °C Charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities Elexposure
90 % (APF 10) ≤ 56 °C charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities e/exposure
(APF 10) ≤ 56 °C charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities e/exposure
charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities clexposure
charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities elexposure
charging and discharging) at non-dedicated facilities (PROC8a) and discharging) at non-dedicated facilities elexposure
and discharging) at non-dedicated facilities e/exposure nour). Efficiency 70 %
e/exposure nour). Efficiency 70 %
nour). Efficiency 70 %
nour). Efficiency
nour). Efficiency
nour). Efficiency
nour). Efficiency 70 %
,,
,,
,,
≤ 56 °C
harging and discharging) at non-dedicated facilities (PROC8a)
and discharging) at non-dedicated facilities
e/exposure
e/exposure
nges per hour)
are being used
are being used
≤ 56 °C
harging and discharging) at dedicated facilities (PROC8b)
and discharging) at dedicated facilities
e/exposure
nges per hour). 30 %
nae ner nouri - 301%

08/08/2022 (Revision date) IE - en 179/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Supervision in place to chec correctly and operation cond		measures in place are being used		
Other conditions affecting	workers exposure			
indoor				
Maximum process temperat	ure		≤ 56 °C	
6.2.20. Control of worker ex	posure: Transfer of substa	ance or mixture (charging and discha	rging) at dedicated facilities (PROC8b)	
PROC8b	Transfer of substance or	mixture (charging and discharging) at de	edicated facilities	
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance	in product			
Amount used (or containe	d in articles), frequency ar	nd duration of use/exposure		
Exposure duration ≤ 8 h/day				
Technical and organisatio	nal conditions and measu	res		
	k that the risk management	measures in place are being used		
Other conditions affecting	workers exposure			
outdoor				
Maximum process temperat	ure		≤ 56 °C	
6.2.21. Control of worker ex	posure: Transfer of substa	ance or mixture (charging and discha	rging) at dedicated facilities (PROC8b)	
PROC8b	Transfer of substance or	mixture (charging and discharging) at de	edicated facilities	
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or containe	d in articles), frequency a	nd duration of use/exposure		
Exposure duration	a in artiology, noquency ar	≤ 8 h/day		
<u> </u>	nal conditions and massu	,		
Technical and organisatio		than 1 to 3 air changes per hour)		
Local exhaust ventilation - e	` ` `	than 1 to 5 an changes per nour)	90 % Inhalation	
Local exhaust ventilation - efficiency of at least		80 % Dermal		
Supervision in place to chec correctly and operation cond		measures in place are being used		
Other conditions affecting	workers exposure			
indoor				
Maximum process temperat	ure		≤ 56 °C	
6.2.22. Control of worker ex PROC9)	posure: Transfer of substa	ance or mixture into small containers	(dedicated filling line, including weighing)	
PROC9	Transfer of substance or	preparation into small containers (dedic	ated filling line, including weighing)	
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or containe	d in articles), frequency ar	nd duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisatio	nal conditions and measu	res		
Supervision in place to chec correctly and operation cond	•	measures in place are being used		
Other conditions affecting	workers exposure			
outdoor				
Maximum process temperat	ure		≤ 56 °C	
	posure: Transfer of substa	ance or mixture into small containers	(dedicated filling line, including weighing)	
PROC9	Transfer of substance ==	proparation into amall containing (dealing	oted filling line, including weighing)	
PROC9	mansier of substance of	preparation into small containers (dedic	ated miling line, including weigning)	

08/08/2022 (Revision date) IE - en 180/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
Technical and organisation	onal conditions and measu	res	
		than 3 to 5 air changes per hour).	30 %
Efficiency	` ` `	<u> </u>	
Supervision in place to checorrectly and operation con		measures in place are being used	
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera			≤ 56 °C
.2.24. Control of worker ex ROC9)	κροsure: Transfer of substa	ance or mixture into small containers	(dedicated filling line, including weighing)
PROC9	Transfer of substance or	preparation into small containers (dedic	ated filling line, including weighing)
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contained	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measu	res	
		than 1 to 3 air changes per hour)	
Local exhaust ventilation - e	efficiency of at least	<u> </u>	80 %
Supervision in place to checorrectly and operation con		measures in place are being used	
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera	ture		≤ 56 °C
	cposure: Roller application		
PROC10	Roller application or brush	ning	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contained	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measu	res	
Supervision in place to che correctly and operation con		measures in place are being used	
Conditions and measures	related to personal protec	tion, hygiene and health evaluation	
	a minimum efficiency of (%)		90 %
Wear a respirator providing			(APF 10)
Wear a respirator providing Other conditions affecting	g workers exposure		(APF 10)
, ,	g workers exposure		(APF 10)
Other conditions affecting	•		(APF 10) ≤ 56 °C
Other conditions affecting indoor, and/or, outdoor Maximum process tempera	•	or brushing (PROC10)	
Other conditions affecting indoor, and/or, outdoor Maximum process tempera	ture		
Other conditions affecting indoor, and/or, outdoor Maximum process tempera 2.26. Control of worker expression of the control of the control of worker expression of the control of t	ture sposure: Roller application Roller application or brust		
Other conditions affecting indoor, and/or, outdoor Maximum process tempera 2.26. Control of worker exPROC10 Product (article) characte	ture sposure: Roller application Roller application or brust		
Other conditions affecting indoor, and/or, outdoor Maximum process tempera 2.26. Control of worker expredict (article) characte Physical form of product	ture kposure: Roller application Roller application or brust ristics	ning	
Other conditions affecting indoor, and/or, outdoor Maximum process tempera 2.2.6. Control of worker expredict (article) characte Physical form of product Concentration of substance	ture cposure: Roller application Roller application or brust ristics in product	Liquid	
Other conditions affecting indoor, and/or, outdoor Maximum process tempera 2.2.6. Control of worker expredict (article) characte Physical form of product Concentration of substance Amount used (or contained)	ture cposure: Roller application Roller application or brust ristics in product	Liquid ≤ 100 %	
Other conditions affecting indoor,and/or,outdoor Maximum process tempera 2.2.6. Control of worker expression of the product (article) characte Physical form of product Concentration of substance Amount used (or contained Exposure duration	ture cposure: Roller application Roller application or brust ristics in product	Liquid ≤ 100 % nd duration of use/exposure ≤ 8 h/day	

08/08/2022 (Revision date) IE - en 181/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

correctly and operation conditions follo		
Other conditions affecting workers	exposure	
indoor		4.50°0
Maximum process temperature	allan anniination on brushina (PROCAS)	≤ 56 °C
	oller application or brushing (PROC10)	
	oplication or brushing	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articl	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational condi-	ions and measures	
Provide a good standard of general ve	ntilation (not less than 1 to 3 air changes per ho	ur)
Local exhaust ventilation - efficiency o Supervision in place to check that the correctly and operation conditions follo	isk management measures in place are being ι	80 %
Other conditions affecting workers	exposure	
indoor		
Maximum process temperature		≤ 56 °C
.2.28. Control of worker exposure: S	praying (PROC11)	
PROC11 Non ind	ustrial spraying	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articl	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/mir	*	
Technical and organisational condi	,	
~	ntilation (not less than 1 to 3 air changes per ho	ur\
Local exhaust ventilation - efficiency o	` .	80 %
Surface spraying of liquids. Spraying v		00 %
Ensure that direction of application is	nly horizontal or downward.	
Supervision in place to check that the correctly and operation conditions follows:	isk management measures in place are being ι wed.	sed
Other conditions affecting workers	exposure	
Indoors,Assumes large workrooms		
Maximum process temperature		≤ 56 °C
.2.29. Control of worker exposure: S	praying (PROC11)	
PROC11 Non ind	ustrial spraying	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articl	es), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/mir	ute)	
Technical and organisational condi	ions and measures	
Surface spraying of liquids. Spraying v		
Ensure that direction of application is		
	; isk management measures in place are being ι	sed
· ·	personal protection, hygiene and health eva	luation
		90 %
Wear a respirator providing a minimun	eniciency of (%):	90 /6

08/08/2022 (Revision date) IE - en 182/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Wear gloves providing a mi	nimum efficiency of (%):		80 % (EN 374)
Other conditions affecting	y workers exposure		
ndoors,Assumes large worl	krooms,and/or,Outdoors,clos	e to buildings (< 4 m)	
Maximum process temperat	ture		≤ 56 °C
2.30. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at r	non-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles) frequency an	d duration of use/exposure	
Exposure duration	a in articlocy, iroquelloy ari	≤ 8 h/day	
<u>'</u>		, , , , , , , , , , , , , , , , , , ,	
	nal conditions and measur		
	ck that the risk management r	air changes per hour). Efficiency neasures in place are being used	70 %
Other conditions affecting	workers exposure		
ndoor			
Maximum process temperat	ture		≤ 56 °C
2.31. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at n	non-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
	•		
•	ed in articles), frequency an	d duration of use/exposure ≤ 8 h/day	
Exposure duration		•	
	nal conditions and measur		
Supervision in place to chec correctly and operation cond		neasures in place are being used	
, , , , , , , , , , , , , , , , , , ,		ion, hygiene and health evaluation	
	a minimum efficiency of (%):		90 %
vocar a respirator providing	a minimum emolecity of (70).		(APF 10)
Other conditions affecting	y workers exposure		
ndoor,and/or,Outdoor			
Maximum process temperat	ture		≤ 56 °C
2.32. Control of worker ex	posure: Equipment cleanin	g and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or n	nixture (charging and discharging) at r	non-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
	·		
•	eu in articies), trequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
	<u> </u>	han 1 to 3 air changes per hour)	
	ck that the risk management r	measures in place are being used	80 %
correctly and operation cond			
correctly and operation cond Other conditions affecting	workers exposure		
· ·	workers exposure		
Other conditions affecting	•		≤ 56 °C

IE - en

183/265

08/08/2022 (Revision date)

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Deleges vents			Delegas and	se agents (ER			as satimation matter-
Release route			Release rate	9			se estimation method
Release fraction to wastev			100 %			ERC	
Release to waste water from			21.32 kg/day	/		ERC	
Release fraction to air fron	·		100 %			ERC	
Release fraction to soil from			20 %			ERC	
Protection target	Unit	Exposur estimation		PNEC	RCF		Assessment method
Freshwater	mg/l	0.881		10.6	0.08		EUSES v2.1.2
Marine water	mg/l	0.083		1.06	0.07		EUSES v2.1.2
Freshwater sediment	mg/kg	3.863		30.4	0.12		EUSES v2.1.2
Marine water sediment	mg/kg	0.365		3.04	0.12		EUSES v2.1.2
Sewage treatment plant	mg/l	1.327		100	0.01	3	EUSES v2.1.2
Soil	mg/kg	0.042		29.5	0.00	1	EUSES v2.1.2
3.2. Environmental releas	se and exposure	Use as binde	ers and relea	ase agents (ER	C8b, ERC	8e)	
Release route			Release rate	e		Relea	se estimation method
Release fraction to wastev	vater		2 %			ERC	
Release to waste water fro	om process		0.426 kg/day	/		ERC	
Release fraction to air fron	n process		0.1 %			ERC	
Release fraction to soil from	m process		1 %			ERC	
Protection target	Unit	Exposur estimation		PNEC	RCF	ł	Assessment method
Freshwater	mg/l	0.751		10.6	0.07	1	EUSES v2.1.2
Marine water	mg/l	0.07		1.06	0.06	6	EUSES v2.1.2
Freshwater sediment	mg/kg	3.292		30.4	0.10	8	EUSES v2.1.2
Marine water sediment	mg/kg	0.308		3.04	0.10	1	EUSES v2.1.2
Sewage treatment plant	mg/l	0.027		100	0		EUSES v2.1.2
Soil	mg/kg	0.023		29.5	0.00	1	EUSES v2.1.2
3.3. Environmental releas	se and exposure	Use as binde	ers and relea	ase agents (ER	C8c, ERC	8f)	
Release route			Release rate	е		Relea	se estimation method
Release fraction to wastev	vater		30 %			Worst	case assumption
Release to waste water from	om process		6.395 kg/day	/		Worst	case assumption
Release fraction to air fron	n process		15 %			ERC	
Release fraction to soil from	m process		0.5 %			ERC	
Protection target	Unit	Exposur estimation		PNEC	RCF	1	Assessment method
Freshwater	mg/l	0.788		10.6	0.07	4	EUSES v2.1.2
Marine water	mg/l	0.074		1.06	0.07		EUSES v2.1.2
Freshwater sediment	mg/kg	3.455		30.4	0.11	4	EUSES v2.1.2
Marine water sediment	mg/kg	0.324		3.04	0.10	7	EUSES v2.1.2
Sewage treatment plant	mg/l	0.398		100	0.00	4	EUSES v2.1.2
Soil	mg/kg	0.029		29.5	0.00	1	EUSES v2.1.2
3.4. Worker exposure Us	e in closed proce	ess; Storage	(PROC1)				
Route of exposure and ty of effects	ype Exposure	estimate		RCR			Method
Dermal - Long-term - syste effects		/kg bw/day		0			ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/	/m³		0			ECETOC TRA worker
Sum RCR - Long-term - systemic effects	0.000	/m3		0			ECETOO TDA washee
Acute - Local - Inhalation	0.968 mg/		in closed-ea	0 ontinuous prod	coss with	occasio	ECETOC TRA worker onal controlled exposure or process
	ennear productio		m closea co	antinuous prot	Jess Willi	occasic	mai controlled exposure of process
		OC2)					
th equivalent containmen Route of exposure and ty of effects	t conditions (PR	oc2) e estimate		RCR			Method

0.007

ECETOC TRA worker

1.37 mg/kg bw/day

Dermal - Long-term - systemic

effects

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
6.3.6. Worker exposure Use in c		formulation); With occasional contro	olled exposure (PROC3)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
6.3.7. Worker exposure Chemica	al production where opportunity for	exposure arises (PROC4)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.387	ECETOC TRA worker
			ECETOC TRA WOIKEI
	al production where opportunity for		Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1690 mg/m³	0.387	ECETOC TRA worker
	al production where opportunity for		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects			
	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.137	
systemic effects Acute - Local - Inhalation	484 mg/m³	0.137	ECETOC TRA worker ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type		0.137	
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic	484 mg/m³ or blending in batch processes (PR	0.137 0.2 ROC5)	ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects	484 mg/m³ or blending in batch processes (PR Exposure estimate	0.137 0.2 ROC5) RCR	ECETOC TRA worker Method
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³	0.137 0.2 RCR 0.074 0.1 0.174	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.137 0.2 RCR 0.074 0.1 0.174	ECETOC TRA worker Method ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³	0.137 0.2 RCR 0.074 0.1 0.174	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.137 0.2 RCR 0.074 0.1 0.174	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.11. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³ 484 mg/m³ or blending in batch processes (PR Exposure estimate 2.742 mg/kg bw/day	0.137 0.2 RCR 0.074 0.1 0.174 0.2 RCCS) RCR	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.11. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³ 484 mg/m³ or blending in batch processes (PR Exposure estimate	0.137 0.2 RCR 0.074 0.1 0.174 0.2 RCCS) RCR 0.015 0.2	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
systemic effects Acute - Local - Inhalation 6.3.10. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 6.3.11. Worker exposure Mixing Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	484 mg/m³ or blending in batch processes (PR Exposure estimate 13.71 mg/kg bw/day 121 mg/m³ 484 mg/m³ or blending in batch processes (PR Exposure estimate 2.742 mg/kg bw/day	0.137 0.2 RCR 0.074 0.1 0.174 0.2 RCCS) RCR	ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

185/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

6.3.12. Worker exposure Mixing (or blending in batch processes (PR	OC5)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m ³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
6.3.13. Worker exposure Calende	ering (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	404 (2	0.247	FOFTOO TDA
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·	ering (including Banburys) (PROC6)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1.450 mm/m3	0.447	FOFTOC TD A weeker
Acute - Local - Inhalation	1450 mg/m³ ering (including Banburys) (PROC6)		ECETOC TRA worker
· · · · · · · · · · · · · · · · · · ·			Matter
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	5.486 mg/kg bw/day	0.029	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	000	0.229	FORTOO TDAd.
Acute - Local - Inhalation	968 mg/m ³ r of substance or mixture (charging	*	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4 / 2	0.174	FOFTOO TRA
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
Route of exposure and type of effects	r of substance or mixture (charging Exposure estimate	RCR	Method
Dermal - Long-term - systemic	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
effects Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
	r of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 186/265

Sum RCR - Long-term -		0.215	
systemic effects Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
	er of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	er of substance or mixture (charging	<u> </u>	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	er of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	040	0.065	FOFTOO TDA
Acute - Local - Inhalation	242 mg/m ³ or of substance or mixture into smal	0.1	ECETOC TRA worker
·		`	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
· _ ·	er of substance or mixture into smal		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000 m m/m²	0.387	FOFTOO TDAd.ss
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	r of substance or mixture into smal		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.372 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
16.3.25. Worker exposure Roller a Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker

Inhalation - Long-term -			
systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.247	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
16.3.26. Worker exposure Roller a	application or brushing (PROC10		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4450	0.447	FOSTOO TO
Acute - Local - Inhalation 16.3.27. Worker exposure Roller a	1450 mg/m³	0.599	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.347	FOSTOO TO A
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
16.3.28. Worker exposure Sprayin			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	107.1 mg/kg bw/day	0.576	ECETOC TRA worker
Inhalation - Long-term - systemic effects	5.5 mg/m³	0.005	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects		0.581	
Acute - Local - Inhalation 16.3.29. Worker exposure Sprayin	1940 mg/m³	0.802	ECETOC TRA worker
		DCD	Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	21.43 mg/kg bw/day	0.115	ECETOC TRA worker
Inhalation - Long-term - systemic effects	1000 mg/m³	0.826	Used ART model (v1.5)
Sum RCR - Long-term -		0.044	
systemic effects	069 mg/m3	0.941	ECETOC TRA worker
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
		0.4	ECETOC TRA worker Method
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic	nent cleaning and maintenance (I	0.4 PROC8a, PROC28)	
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects	nent cleaning and maintenance (I Exposure estimate	0.4 PROC8a, PROC28) RCR	Method
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³	0.4 PROC8a, PROC28) RCR	Method ECETOC TRA worker
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599	Method ECETOC TRA worker
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599	Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599	Method ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 16.3.31. Worker exposure Equipm Route of exposure and type	nent cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³ 1450 mg/m³ nent cleaning and maintenance (I	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599 PROC8a, PROC28)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 16.3.31. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	Exposure estimate 13.71 mg/kg bw/day 363 mg/m³ 1450 mg/m³ nent cleaning and maintenance (I	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599 PROC8a, PROC28) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
Acute - Local - Inhalation 16.3.30. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 16.3.31. Worker exposure Equipm Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day 363 mg/m³ 1450 mg/m³ ment cleaning and maintenance (I Exposure estimate 13.71 mg/kg bw/day	0.4 PROC8a, PROC28) RCR 0.074 0.3 0.374 0.599 PROC8a, PROC28) RCR 0.074	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

16.3.32. Worker exposure Equipm	ent cleaning and maintenance (PR	OC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m ³	0.4	ECETOC TRA worker
16.4. Guidance to Downstr	eam User to evaluate whethe	er he works inside the bound	aries set by the ES
16.4.1. Environment			
Guidance - Environment	No additional risk managemen guarantee safe use for environ	t measures, besides those that are mement.	entioned above, are needed to
16.4.2. Health			
Guidance - Health	No additional risk managemen guarantee safe use for workers	t measures, besides those that are mess.	entioned above, are needed to

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

17. AC SE17: Polymer manufacturing

Polymer manufacturing		ES Ref.: A	C SE17	Association ref code: PV
. Olymor manaraota mg		ES Type:	Worker	
Environment				
CS 1	Polymer manufacturing		ERC8a, ERC8d	
CS 2	Polymer manufacturing		ERC8c, ERC8f	
Worker				
CS 3	Use in closed process; Storage		PROC1	
CS 4	Chemical production or refinery in process with occasional controlled with equivalent containment cont	ed exposure or processes	PROC2	
CS 5	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 6	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 7	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 8	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 9	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 10	Transfer of substance or mixture discharging) at dedicated facilities		PROC8b	
CS 11	Transfer of substance or mixture (dedicated filling line, including w		PROC9	
CS 12	Transfer of substance or mixture (dedicated filling line, including w		PROC9	
CS 13	Transfer of substance or mixture (dedicated filling line, including w		PROC9	
CS 14	Tabletting, compression, extrusion granulation	on, pelettisation,	PROC14	
CS 15	Tabletting, compression, extrusion granulation	on, pelettisation,	PROC14	
CS 16	Tabletting, compression, extrusion granulation	on, pelettisation,	PROC14	
CS 17	Tabletting, compression, extrusion granulation	on, pelettisation,	PROC14	
CS 18	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 19	Equipment cleaning and mainter	nance	PROC8a, PROC28	
CS 20	Equipment cleaning and mainter	nance	PROC8a, PROC28	
Processes, tasks, activities covered	d Widespread use b	oy professional workers (PW	/)	
.2. Conditions of use affec	ting exposure			
.2.1. Control of environmental exp	posure: Polymer manufacturing	(ERC8a, ERC8d)		

7.2.1. Control of environment	ntal exposure: Polymer manufacturing (ERC8a, ERC8d)		
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)		
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)		
Amount used, frequency ar	nd duration of use (or from service life)		
Amounts used	≤ 0.021 t/d		
Conditions and measures r	related to sewage treatment plant		
Municipal Sewage Treatment	t Plant		
Conditions and measures r	related to treatment of waste (including article waste)		
Dispose of waste in accordanglegislation	nce with environmental		
7.2.2. Control of environment	ntal exposure: Polymer manufacturing (ERC8c. ERC8f)		

08/08/2022 (Revision date) IE - en 190/265

Widespread use leading to inclusion into/onto article (indoor)

Widespread use leading to inclusion into/onto article (outdoor)

ERC8c

ERC8f

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used, frequency an			
	nd duration of use (or fron		
Amounts used		≤ 0.021 t/d	
Conditions and measures re		nt plant	
Municipal Sewage Treatment	Plant		
Conditions and measures re	elated to treatment of was	ste (including article waste)	
Dispose of waste in accordan legislation	ice with environmental		
7.2.3. Control of worker expo	sure: Use in closed proce	ess: Storage (PROC1)	
PROC1			od of exposure or processes with equivalent
11.001	containment conditions	miles, in elecced process milieut internies	or or oxposure or processes with equivalent
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measur	es	
		t likelihood of exposure or processes	
with equivalent containment of	conditions	· ·	
Supervision in place to check correctly and operation condit		measures in place are being used	
Other conditions affecting v			
indoor,and/or,outdoor	•		
Maximum process temperatur	re		≤ 56 °C
			ocess with occasional controlled exposure or
rocesses with equivalent cor	` <u> </u>	<u> </u>	
PROC2	Chemical production or ref with equivalent containment	,	occasional controlled exposure or processes
Droduct (article) characteris	•		
Product (article) characteris Physical form of product	sucs	Liquid	
Concentration of substance in	n product	≤ 100 %	
	•		
Amount used (or contained Exposure duration	in articles), frequency an	≤ 8 h/day	
<u> </u>		•	
Technical and organisation		es	
Technical and organisation	ery in closed continuous pro-	es cess with occasional controlled	
Technical and organisations Chemical production or refine exposure or processes with e Supervision in place to check	ery in closed continuous pro- quivalent containment cond that the risk management r	es cess with occasional controlled	
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit	ery in closed continuous pro- equivalent containment cond that the risk management r tions followed.	es cess with occasional controlled ditions	
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting w	ery in closed continuous pro- equivalent containment cond that the risk management r tions followed.	es cess with occasional controlled ditions	
Technical and organisations: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting vindoor,and/or,outdoor	ery in closed continuous pro- quivalent containment cond that the risk management r tions followed. workers exposure	es cess with occasional controlled ditions	< 56 °C
Technical and organisations: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation conditions affecting windoor,and/or,outdoor Maximum process temperature	ery in closed continuous pro- quivalent containment cond that the risk management r tions followed. workers exposure	es cess with occasional controlled ditions measures in place are being used	≤ 56 °C
Technical and organisations: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation conditions affecting windoor,and/or,outdoor Maximum process temperature	ery in closed continuous pro- quivalent containment cond that the risk management r tions followed. workers exposure re sure: Transfer of substan	cess with occasional controlled ditions measures in place are being used	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting v indoor,and/or,outdoor Maximum process temperatur 7.2.5. Control of worker expo	ery in closed continuous pro- quivalent containment cond that the risk management rations followed. workers exposure re sure: Transfer of substance or management rations followed.	es cess with occasional controlled ditions measures in place are being used	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature. 7.2.5. Control of worker exportant product (article) characteris	ery in closed continuous pro- quivalent containment cond that the risk management rations followed. workers exposure re sure: Transfer of substance or management rations followed.	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharging) at no	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting vindoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exportant product (article) characteris Physical form of product	ery in closed continuous pro- quivalent containment cond that the risk management rations followed. workers exposure re sure: Transfer of substant Transfer of substance or matters	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exportance of the product (article) characteris Physical form of product Concentration of substance in	ery in closed continuous pro- quivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substant Transfer of substance or matter.	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 1 100 %	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting vindoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exportance PROC8a Product (article) characterist Physical form of product Concentration of substance in	ery in closed continuous pro- quivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substant Transfer of substance or matter.	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 1 100 % 1 2 3 100 % 2 3 100 %	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature. 7.2.5. Control of worker exportance in Physical form of product Concentration of substance in Amount used (or contained Exposure duration	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substan Transfer of substance or mestics n product I in articles), frequency an	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and dischargenixture (charging and discharging) at no Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exportance PROC8a Product (article) characterist Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation:	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substan Transfer of substance or re- stics n product in articles), frequency an	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 100 % d duration of use/exposure 100 %	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exportance PROC8a Product (article) characterist Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation:	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substan Transfer of substance or re- stics n product in articles), frequency an al conditions and measur that the risk management re-	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and dischargenixture (charging and discharging) at no Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperatur 7.2.5. Control of worker exporation product (article) characteris Physical form of product Concentration of substance in Amount used (or contained exposure duration Technical and organisation: Supervision in place to check correctly and operation conditions	ery in closed continuous pro- quivalent containment cond- that the risk management re- tions followed. workers exposure re esure: Transfer of substant Transfer of substance or mestics n product l in articles), frequency and al conditions and measure. that the risk management retions followed.	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 100 % d duration of use/exposure 100 %	ging) at non-dedicated facilities (PROC8a)
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperatur 7.2.5. Control of worker exporation product (article) characteris Physical form of product Concentration of substance in Amount used (or contained exposure duration Technical and organisation: Supervision in place to check correctly and operation conditions	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substant Transfer of substance or materials. stics n product l in articles), frequency and al conditions and measure that the risk management re- tions followed. elated to personal protect	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 100 % d duration of use/exposure 8 h/day es measures in place are being used	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exports PROC8a Product (article) characteris Physical form of product Concentration of substance in Amount used (or contained exposure duration Technical and organisations Supervision in place to check correctly and operation conditions and measures refered to the substance of the conditions and measures refered to the supervision of the conditions and measures refered to the supervision of the conditions and measures refered to the supervision of the conditions and measures refered to the supervision of the conditions and measures refered to the supervision of the super	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substant Transfer of substance or re- stics n product l in articles), frequency an al conditions and measur that the risk management re- tions followed. elated to personal protect minimum efficiency of (%):	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 100 % d duration of use/exposure 8 h/day es measures in place are being used	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities
Technical and organisation: Chemical production or refine exposure or processes with e Supervision in place to check correctly and operation condit Other conditions affecting windoor, and/or, outdoor Maximum process temperature 7.2.5. Control of worker exports PROC8a Product (article) characteris Physical form of product Concentration of substance in Amount used (or contained exposure duration Technical and organisations Supervision in place to check correctly and operation conditions and measures refined	ery in closed continuous pro- equivalent containment cond- that the risk management re- tions followed. workers exposure re sure: Transfer of substant Transfer of substance or re- stics n product l in articles), frequency an al conditions and measur that the risk management re- tions followed. elated to personal protect minimum efficiency of (%):	cess with occasional controlled ditions measures in place are being used ce or mixture (charging and discharginixture (charging and discharging) at no Liquid 100 % d duration of use/exposure 8 h/day es measures in place are being used	ging) at non-dedicated facilities (PROC8a) n-dedicated facilities

08/08/2022 (Revision date) IE - en 191/265

	erature		≤ 56 °C
2.6. Control of worker e	exposure: Transfer of substa	nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) charac	cteristics		
Physical form of product		Liquid	
Concentration of substan	nce in product	≤ 100 %	
	•	nd duration of upolognocure	
•	ined in articles), frequency a		
Exposure duration		≤ 8 h/day	
	itional conditions and measu		
	heck that the risk management	0 air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affect			
ndoor	3		
Maximum process tempe	erature		≤ 56 °C
<u> </u>		nce or mixture (charging and discha	rging) at non-dedicated facilities (PROC8a)
PROC8a	-	mixture (charging and discharging) at n	
			Journal Montes
Product (article) charac	teristics		
Physical form of product		Liquid	
Concentration of substan	nce in product	≤ 100 %	
Amount used (or conta	ined in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisa	tional conditions and measu	ires	
		than 1 to 3 air changes per hour)	
Local exhaust ventilation	· · · · · · · · · · · · · · · · · · ·	than 1 to 5 an changes per nour)	80 %
	heck that the risk management	measures in place are being used	00 /0
Other conditions affect	ing workers exposure		
Indoor			
Maximum process tempe	erature		≤ 56 °C
2.8. Control of worker e	exposure: Transfer of substa	nce or mixture (charging and discha	rging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or	mixture (charging and discharging) at d	edicated facilities
Product (article) charac	cteristics		
(, c		Liquid	
Physical form of product		·	
Physical form of product Concentration of substan		< 100 %	
Concentration of substan	nce in product	≤ 100 %	
Concentration of substan		nd duration of use/exposure	
Concentration of substan	nce in product		
Concentration of substan Amount used (or conta Exposure duration	nce in product	nd duration of use/exposure ≤ 8 h/day	
Concentration of substant Amount used (or contant Exposure duration Technical and organisa Provide a good standard Efficiency	nce in product ined in articles), frequency a ational conditions and measu of general ventilation (not less	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour).	30 %
Concentration of substant Amount used (or contal Exposure duration Technical and organisa Provide a good standard Efficiency Supervision in place to cloorrectly and operation c	ince in product ined in articles), frequency a itional conditions and measu of general ventilation (not less heck that the risk management onditions followed.	nd duration of use/exposure ≤ 8 h/day ures	30 %
Concentration of substant Amount used (or contal Exposure duration Technical and organisal Provide a good standard Efficiency Supervision in place to observe the conditions affect of the conditions affect or conditions	ince in product ined in articles), frequency a itional conditions and measu of general ventilation (not less heck that the risk management onditions followed.	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour).	30 %
Concentration of substant Amount used (or contain Exposure duration Technical and organisal Provide a good standard Efficiency Supervision in place to observe the correctly and operation contains affect and or	ined in articles), frequency a stional conditions and measured of general ventilation (not less sheck that the risk management onditions followed.	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour).	
Concentration of substant Amount used (or contant Exposure duration Technical and organisa Provide a good standard Efficiency	ined in articles), frequency a stional conditions and measured of general ventilation (not less sheck that the risk management onditions followed.	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour).	30 % ≤ 56 °C
Concentration of substant Amount used (or contal Exposure duration Technical and organisa Provide a good standard Efficiency Supervision in place to cloorrectly and operation content of the conditions affect andoor Maximum process temper	ince in product ined in articles), frequency a ational conditions and measu of general ventilation (not less heck that the risk management onditions followed. ing workers exposure	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour). measures in place are being used	
Amount used (or conta Exposure duration Fechnical and organisa Provide a good standard Efficiency Supervision in place to cleorrectly and operation conditions affect Indoor Maximum process temper 2.9. Control of worker	ined in articles), frequency a stional conditions and measured of general ventilation (not less theck that the risk management onditions followed. ing workers exposure erature	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour). measures in place are being used	≤ 56 °C rging) at dedicated facilities (PROC8b)
Concentration of substant Amount used (or contal Exposure duration Technical and organisal Provide a good standard Efficiency Supervision in place to cleorrectly and operation continuous affect and organisal modern conditions affect and organisal mode	ined in articles), frequency a stional conditions and measured of general ventilation (not less heck that the risk management onditions followed. ing workers exposure erature exposure: Transfer of substace or	nd duration of use/exposure ≤ 8 h/day tres than 3 to 5 air changes per hour). measures in place are being used nce or mixture (charging and discharge)	≤ 56 °C rging) at dedicated facilities (PROC8b)
Concentration of substant Amount used (or conta Exposure duration Technical and organisa Provide a good standard Efficiency Supervision in place to clear contently and operation or Other conditions affect indoor Maximum process temper 2.9. Control of worker of	ined in articles), frequency a stional conditions and measured of general ventilation (not less heck that the risk management onditions followed. ing workers exposure erature exposure: Transfer of substace or	nd duration of use/exposure ≤ 8 h/day tres than 3 to 5 air changes per hour). measures in place are being used nce or mixture (charging and discharge)	≤ 56 °C rging) at dedicated facilities (PROC8b)
Concentration of substantal Amount used (or contal Exposure duration Technical and organisal Provide a good standard Efficiency Supervision in place to observe the conditions affect and operation of the conditions affect and organisal Maximum process temper 2.9. Control of worker of PROC8b Product (article) characterists	ined in articles), frequency a stional conditions and measure of general ventilation (not less theck that the risk management onditions followed. ing workers exposure erature exposure: Transfer of substate Transfer of substance or exteristics	nd duration of use/exposure ≤ 8 h/day ires than 3 to 5 air changes per hour). measures in place are being used ince or mixture (charging and discharmixture (charging and discharging) at description.	≤ 56 °C rging) at dedicated facilities (PROC8b)
Amount used (or conta Exposure duration Technical and organisa Provide a good standard Efficiency Supervision in place to of correctly and operation or Other conditions affect indoor Maximum process temper 2.9. Control of worker of PROC8b Product (article) charace Physical form of product Concentration of substan	ined in articles), frequency a stional conditions and measured of general ventilation (not less heck that the risk management onditions followed. ing workers exposure erature exposure: Transfer of substate or steristics ace in product	nd duration of use/exposure ≤ 8 h/day tres than 3 to 5 air changes per hour). measures in place are being used nce or mixture (charging and discharmixture (charging and discharging) at d Liquid ≤ 100 %	≤ 56 °C rging) at dedicated facilities (PROC8b)
Amount used (or conta Exposure duration Technical and organisa Provide a good standard Efficiency Supervision in place to of correctly and operation or Other conditions affect indoor Maximum process temper 2.9. Control of worker of PROC8b Product (article) charace Physical form of product Concentration of substan	ined in articles), frequency a stional conditions and measure of general ventilation (not less theck that the risk management onditions followed. ing workers exposure erature exposure: Transfer of substate Transfer of substance or exteristics	nd duration of use/exposure ≤ 8 h/day tres than 3 to 5 air changes per hour). measures in place are being used nce or mixture (charging and discharmixture (charging and discharging) at d Liquid ≤ 100 %	≤ 56 °C rging) at dedicated facilities (PROC8b)

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisational conditions and measur Supervision in place to check that the risk management correctly and operation conditions followed.				
Other conditions affecting workers exposure				
outdoor				
Maximum process temperature		≤ 56 °C		
7.2.10. Control of worker exposure: Transfer of substa	nce or mixture (charging and discha			
	nixture (charging and discharging) at de			
	initial (charging and discharging) at de	Suicated facilities		
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product ≤ 100 %				
Amount used (or contained in articles), frequency an				
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and measur	es			
Provide a good standard of general ventilation (not less	han 1 to 3 air changes per hour)			
Local exhaust ventilation - efficiency of at least		90 %		
Local exhaust ventilation - efficiency of at least		Inhalation 80 %		
Local extraust vertilation - eniciency of at least		Dermal		
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used			
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		
7.2.11. Control of worker exposure: Transfer of substa PROC9)	nce or mixture into small containers	(dedicated filling line, including weighing)		
PROC9 Transfer of substance or p	reparation into small containers (dedicate	ated filling line, including weighing)		
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	· ≤ 100 %			
Amount used (or contained in articles), frequency an	d duration of use/exposure			
Exposure duration	≤ 8 h/day			
·				
Technical and organisational conditions and measur Supervision in place to check that the risk management correctly and operation conditions followed.				
Other conditions affecting workers exposure				
outdoor				
Maximum process temperature		≤ 56 °C		
7.2.12. Control of worker exposure: Transfer of substa PROC9)	nce or mixture into small containers	(dedicated filling line, including weighing)		
	reparation into small containers (dedicate	ated filling line, including weighing)		
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in product	≤ 100 %			
Amount used (or contained in articles), frequency an	d duration of use/exposure			
Exposure duration	≤ 8 h/day			
Technical and organisational conditions and measur	AS			
Provide a good standard of general ventilation (not less tefficiency		30 %		
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used			
Other conditions affecting workers exposure				
indoor				
Maximum process temperature		≤ 56 °C		

193/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

17.2.13. Control of worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC9	Transfer of substance	ce or preparation into small containers (dedic	cated filling line, including weighing)	
Product (article) charact	teristics			
Physical form of product Liquid				
Concentration of substance	ce in product	≤ 100 %		
Amount used (or contain	ned in articles), frequer	ncy and duration of use/exposure		
Exposure duration				
	tional conditions and m	· · · · · · · · · · · · · · · · · · ·		
Technical and organisat				
Local exhaust ventilation	· ·	t less than 1 to 3 air changes per hour)	80 %	
	eck that the risk manage	ement measures in place are being used	00 /6	
Other conditions affection	ng workers exposure			
indoor				
Maximum process temper	rature		≤ 56 °C	
2.14. Control of worker	exposure: Tabletting, c	ompression, extrusion, pelettisation, gra	nulation (PROC14)	
PROC14	Tabletting, compres	sion, extrusion, pelettisation, granulation		
Product (article) charact	teristics			
Physical form of product		Liquid		
Concentration of substant	ce in product	≤ 100 %		
	•			
· ·	ned in articles), frequer	ncy and duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisat				
Supervision in place to ch correctly and operation co		ement measures in place are being used		
Conditions and measure	es related to personal p	protection, hygiene and health evaluation		
Wear a respirator providir	ng a minimum efficiency o	of (%):	90 %	
			(ADE 10)	
Other conditions offerti			(APF 10)	
Other conditions affecti	ng workers exposure		(APF 10)	
indoor,and/or,outdoor				
indoor,and/or,outdoor Maximum process tempel	rature		≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker	rature exposure: Tabletting, c	compression, extrusion, pelettisation, gra	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14	rature exposure: Tabletting, c Tabletting, compres	compression, extrusion, pelettisation, granusion, extrusion, pelettisation, granulation	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact	rature exposure: Tabletting, c Tabletting, compres		≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product	rature exposure: Tabletting, c Tabletting, compresesteristics	sion, extrusion, pelettisation, granulation	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product	rature exposure: Tabletting, c Tabletting, compresesteristics	sion, extrusion, pelettisation, granulation	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance	rature exposure: Tabletting, c Tabletting, compres teristics ce in product	sion, extrusion, pelettisation, granulation	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain	rature exposure: Tabletting, c Tabletting, compres teristics ce in product	Liquid ≤ 100 %	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration	rature exposure: Tabletting, c Tabletting, comprese teristics ce in product ned in articles), frequer	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat	rature exposure: Tabletting, c Tabletting, compres teristics ce in product ned in articles), frequer tional conditions and m	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of	rature exposure: Tabletting, c Tabletting, compres teristics ce in product ned in articles), frequer tional conditions and m of general ventilation (no	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day	≤ 56 °C nulation (PROC14)	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation of Supervision in place to ch	rature exposure: Tabletting, compression Tabletting, compression teristics ce in product ned in articles), frequentional conditions and more general ventilation (no - efficiency of at least neck that the risk manage	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day	≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation or	rature exposure: Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and mand of general ventilation (no efficiency of at least leach that the risk manage on dittons followed.	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour)	≤ 56 °C nulation (PROC14)	
Amount used (or contain Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation of Supervision in place to che correctly and operation co Other conditions steeped	rature exposure: Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and mand of general ventilation (no efficiency of at least leach that the risk manage on dittons followed.	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour)	≤ 56 °C nulation (PROC14)	
midoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation co Other conditions affection	rature exposure: Tabletting, c Tabletting, compres teristics ce in product ned in articles), frequer tional conditions and m of general ventilation (no - efficiency of at least neck that the risk manage onditions followed. ng workers exposure	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour)	≤ 56 °C nulation (PROC14)	
Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation co Other conditions affection Maximum process temper	rature exposure: Tabletting, c Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and more general ventilation (no efficiency of at least neck that the risk manage proditions followed. ng workers exposure	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour)	≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C	
Amount used (or contain Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation of Supervision in place to che correctly and operation of Maximum process temper 2.16. Control of worker	rature exposure: Tabletting, c Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and more of general ventilation (note that the risk manage on ditions followed. ng workers exposure rature exposure: Tabletting, c	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures It less than 1 to 3 air changes per hour) ement measures in place are being used	≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation of Supervision in place to che correctly and operation occ Other conditions affection indoor Maximum process temper 2.16. Control of worker PROC14	rature exposure: Tabletting, c Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and more general ventilation (no - efficiency of at least neck that the risk manage on ditions followed. ng workers exposure rature exposure: Tabletting, c Tabletting, comprese	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour) ement measures in place are being used	≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C	
indoor,and/or,outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation co Other conditions affection indoor Maximum process temper	rature exposure: Tabletting, c Tabletting, comprese teristics ce in product ned in articles), frequere tional conditions and more general ventilation (no - efficiency of at least neck that the risk manage on ditions followed. ng workers exposure rature exposure: Tabletting, c Tabletting, comprese	Liquid ≤ 100 % ncy and duration of use/exposure ≤ 8 h/day neasures t less than 1 to 3 air changes per hour) ement measures in place are being used	≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C	

08/08/2022 (Revision date) IE - en 194/265

	l in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measu	res	
	that the risk management	0 air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ire		≤ 56 °C
	<u> </u>	ession, extrusion, pelettisation, gra	nulation (PROC14)
PROC14	Tabletting, compression, of	extrusion, pelettisation, granulation	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 5 %	
Amount used (or contained	l in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measu	res	
		than 1 to 3 air changes per hour)	
Supervision in place to check	that the risk management	measures in place are being used	
correctly and operation condi	tions followed.	-	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu			≤ 56 °C
	· · · · · · · · · · · · · · · · · · ·	ng and maintenance (PROC8a, PRO	
PROC8a		mixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	l in articles), frequency ar	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measu	res	
Provide a good standard of c	ontrolled ventilation (5 to 10 that the risk management	O air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting			
indoor			
Maximum process temperatu	ire		≤ 56 °C
.2.19. Control of worker exp	osure: Equipment cleanii	ng and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or r	mixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	· ≤ 100 %	
Amount used (or contained	l in articles) frequency ar	nd duration of use/exposure	
Exposure duration	arabico), iroquerioy ar	≤ 8 h/day	
·	al souditions and mass	,	
Technical and organisation		than 1 to 3 air changes per hour)	
Local exhaust ventilation - ef Supervision in place to check	ficiency of at least that the risk management	measures in place are being used	80 %
correctly and operation condi			
Other conditions affecting	workers exposure		
Indoor	uro.		≤ 56 °C
	n 🗠		- S 2D - L
Maximum process temperatu			230 0

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

PROC8a	Transfer of substanc	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities		
PROC28	Manual maintenance	Manual maintenance (cleaning and repair) of machinery		
Product (article) ch	aracteristics			
Physical form of pro-	duct	Liquid		
Concentration of sub	ostance in product	≤ 100 %		
Amount used (or c	ontained in articles), frequen	cy and duration of use/exposure		
Exposure duration ≤ 8 h/day				
Technical and orga	nisational conditions and me	easures		
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.				
Conditions and me	asures related to personal p	rotection, hygiene and health eva	lluation	
Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10)				
Other conditions a	ffecting workers exposure			
indoor,and/or,Outdo	or			
Maximum process temperature ≤ 56 °C				

7.3.1. Environmental release and exposure Polymer manufacturing (ERC6a, ERC6a)				
Release route	Release rate	Release estimation method		
Release fraction to wastewater	100 %	ERC		
Release to waste water from process	21.32 kg/day	ERC		
Dalaman for the state of the st	400.0/	EDO		

Release fraction to air from process 100 % ERC Release fraction to soil from process 20 % ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.881	10.6	0.083	EUSES v2.1.2
Marine water	mg/l	0.083	1.06	0.078	EUSES v2.1.2
Freshwater sediment	mg/kg	3.863	30.4	0.127	EUSES v2.1.2
Marine water sediment	mg/kg	0.365	3.04	0.12	EUSES v2.1.2
Sewage treatment plant	mg/l	1.327	100	0.013	EUSES v2.1.2
Soil	mg/kg	0.042	29.5	0.001	EUSES v2.1.2

17.3.2. Environmental release and exposure Polymer manufacturing (ERC8c, ERC8f)

Release route	Release rate	Release estimation method
Release fraction to wastewater	30 %	Worst case assumption
Release to waste water from process	6.395 kg/day	Worst case assumption
Release fraction to air from process	15 %	ERC
Release fraction to soil from process	0.5 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.7888	10.6	0.074	EUSES v2.1.2
Marine water	mg/l	0.074	1.06	0.07	EUSES v2.1.2
Freshwater sediment	mg/kg	3.455	30.4	0.114	EUSES v2.1.2
Marine water sediment	mg/kg	0.324	3.04	0.107	EUSES v2.1.2
Sewage treatment plant	mg/l	0.398	100	0.004	EUSES v2.1.2
Soil	mg/kg	0.029	29.5	0.001	EUSES v2.1.2

17.3.3. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m³	0	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 196/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

17.3.4. Worker exposure Chemical	production or refinery in closed continuous process with occasional controlled exposure or processes
with equivalent containment condit	ions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
7.3.5. Worker exposure Transfer	of substance or mixture (charging	and discharging) at non-dedicated t	acilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

17.3.6. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker

17.3.7. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

17.3.8. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker

17.3.9. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

17.3.10. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 197/265

Sum RCR - Long-term -		0.065	
systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
	e e	l containers (dedicated filling line, i	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.12. Worker exposure Transfe	r of substance or mixture into smal	l containers (dedicated filling line, i	ncluding weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
· ·		I containers (dedicated filling line, i	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.372 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	ng, compression, extrusion, peletti	```	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
	121 mg/m ³	0.1	ECETOC TRA worker
Inhalation - Long-term - systemic effects		0.440	
systemic effects Sum RCR - Long-term - systemic effects		0.118	EQETOO TRA
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type		0.2	ECETOC TRA worker Method
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic	484 mg/m³ ng, compression, extrusion, peletti	0.2 sation, granulation (PROC14)	
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate	0.2 sation, granulation (PROC14) RCR	Method
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term -	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 0.686 mg/kg bw/day	0.2 sation, granulation (PROC14) RCR	Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 0.686 mg/kg bw/day	0.2 sation, granulation (PROC14) RCR 0.004 0.2	Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ ng, compression, extrusion, pelettis Exposure estimate 0.686 mg/kg bw/day 242 mg/m³	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4	Method ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ ng, compression, extrusion, pelettis Exposure estimate 0.686 mg/kg bw/day 242 mg/m³	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4	Method ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic	484 mg/m³ ng, compression, extrusion, pelettise Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, pelettise	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 sation, granulation (PROC14)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, pelettice Exposure estimate	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 sation, granulation (PROC14) RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic	484 mg/m³ ng, compression, extrusion, pelettis Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, pelettis Exposure estimate 3.43 mg/kg bw/day	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 sation, granulation (PROC14) RCR 0.018	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 3.43 mg/kg bw/day 363 mg/m³	0.2 Sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 Sation, granulation (PROC14) RCR 0.018 0.3 0.318 0.599	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.17. Worker exposure Tablettii	484 mg/m³ ng, compression, extrusion, peletti: Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, peletti: Exposure estimate 3.43 mg/kg bw/day 363 mg/m³ 1450 mg/m³ ng, compression, extrusion, peletti:	0.2 sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 sation, granulation (PROC14) RCR 0.018 0.3 0.318 0.599 sation, granulation (PROC14)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ng, compression, extrusion, pelettice Exposure estimate 3.43 mg/kg bw/day 363 mg/m³	0.2 Sation, granulation (PROC14) RCR 0.004 0.2 0.204 0.4 Sation, granulation (PROC14) RCR 0.018 0.3 0.318 0.599	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
3.18. Worker exposure Equipm			EGETGG THAT WORKER
Route of exposure and type	Exposure estimate	RCR	Method
of effects	·		
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
3.19. Worker exposure Equipm	ent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
3.20. Worker exposure Equipm	ent cleaning and maintenand	ce (PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES
4.1. Environment			
Guidance - Environment	No additional risk mana	agement measures, besides the	ose that are mentioned above, are needed to
	guarantee safe use for		
4.2. Health			
Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to quarantee safe use for workers.		

08/08/2022 (Revision date) IE - en 199/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

18. AC SE18: Use in polymer processing

Use in polymer processing		ES Ref.: AC S ES Type: Wo		Association ref code: P
Environment				
CS 1	Use in polymer processing	E	RC8a, ERC8d	
CS 2	Use in polymer processing	E	RC8c, ERC8f	
Worker				
CS 3	Use in closed process; Storage	P	ROC1	
CS 4	Chemical production or refinery process with occasional controlle with equivalent containment con-	ed exposure or processes	ROC2	
CS 5	Transfer of substance or mixture discharging) at non-dedicated fa		ROC8a	
CS 6	Transfer of substance or mixture discharging) at non-dedicated fa	` 5 5	ROC8a	
CS 7	Transfer of substance or mixture discharging) at non-dedicated fa		ROC8a	
CS 8	Transfer of substance or mixture discharging) at dedicated facilities		ROC8b	
CS 9	Transfer of substance or mixture discharging) at dedicated facilities		ROC8b	
CS 10	Transfer of substance or mixture discharging) at dedicated facilities	` 5 5	ROC8b	
CS 11	Transfer of substance or mixture (dedicated filling line, including w		ROC9	
CS 12	Transfer of substance or mixture (dedicated filling line, including w		ROC9	
CS 13	Transfer of substance or mixture (dedicated filling line, including w		ROC9	
CS 14	Tabletting, compression, extrusion granulation	on, pelettisation, P	ROC14	
CS 15	Tabletting, compression, extrusion granulation	on, pelettisation, P	ROC14	
CS 16	Tabletting, compression, extrusion granulation	on, pelettisation,	ROC14	
CS 17	Tabletting, compression, extrusion granulation	on, pelettisation, P	ROC14	
CS 18	Equipment cleaning and mainter	nance P	ROC8a, PROC28	
CS 19	Equipment cleaning and mainter	nance P	ROC8a, PROC28	
CS 20	Equipment cleaning and mainter	nance P	ROC8a, PROC28	
Processes, tasks, activit	ies covered Widespread use I	by professional workers (PW)		

	<u> </u>	
18.2.1. Control of environmen	tal exposure: Use in polymer pr	ocessing (ERC8a, ERC8d)
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)	
ERC8d	Widespread use of non-reactive	processing aid (no inclusion into or onto article, outdoor)
Amount used, frequency a	nd duration of use (or from serv	ice life)
Amounts used	≤ 0.021 t/d	
Conditions and measures i	related to sewage treatment plar	nt .
Municipal Sewage Treatment Plant		
Conditions and measures i	related to treatment of waste (in	cluding article waste)
Dispose of waste in accordance with environmental legislation		
8.2.2 Control of environmen	tal exposure: Use in polymer pr	ocessing (FRC8c_FRC8f)

08/08/2022 (Revision date) IE - en 200/265

Widespread use leading to inclusion into/onto article (indoor)

Widespread use leading to inclusion into/onto article (outdoor)

ERC8c

ERC8f

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Amount used, frequency and duration of use (or fit Amounts used	rom service life) ≤ 0.021 t/d	
Conditions and measures related to sewage treatr		
Municipal Sewage Treatment Plant	none plane	
Conditions and measures related to treatment of v	wasto (including article waste)	
Dispose of waste in accordance with environmental	waste (including article waste)	
legislation		
2.2.3. Control of worker exposure: Use in closed pro	ocess; Storage (PROC1)	
PROC1 Chemical production or containment conditions		ood of exposure or processes with equivalent
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	SIIres	
Chemical production or refinery in closed process with		
with equivalent containment conditions Supervision in place to check that the risk manageme correctly and operation conditions followed.	<u> </u>	
Other conditions affecting workers exposure		
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
.2.4. Control of worker exposure: Chemical productions (February 2) ocesses with equivalent containment conditions (February 2)		process with occasional controlled exposure o
PROC2 Chemical production or with equivalent contains		th occasional controlled exposure or processes
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency	and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and measure	sures	
Chemical production or refinery in closed continuous pexposure or processes with equivalent containment of Supervision in place to check that the risk manageme	onditions	
correctly and operation conditions followed.		
Other conditions affecting workers exposure		
indoor,and/or,outdoor		≤ 56 °C
Maximum process temperature	towar as mintrus (abouting and disabo	
.2.5. Control of worker exposure: Transfer of subsi	tance or mixture (charging and dischal or mixture (charging and discharging) at n	
	or mixture (charging and discharging) at H	on addicated radiities
Product (article) characteristics	I incid	
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles), frequency		
Exposure duration	≤ 8 h/day	
Technical and organisational conditions and meas		
Supervision in place to check that the risk manageme correctly and operation conditions followed. Conditions and measures related to personal prot	ection, hygiene and health evaluation	
	1.5	90 % (APF 10)
correctly and operation conditions followed. Conditions and measures related to personal prot	1.5	

08/08/2022 (Revision date) IE - en 201/265

Maximum process temp			≤ 56 °C
			rging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) chara	cteristics		
Physical form of produc	t	Liquid	
Concentration of substa	nce in product	≤ 100 %	
Amount used (or cont	ained in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organis	ational conditions and meas	ures	
Provide a good standar	d of controlled ventilation (5 to	10 air changes per hour). Efficiency	70 %
	•	t measures in place are being used	
correctly and operation			
	ting workers exposure		
ndoor Maximum process tomr	oroturo		≤ 56 °C
Maximum process temp		and or mixture (aborging and disabo	
PROC8a		mixture (charging and discharging) at n	rging) at non-dedicated facilities (PROC8a)
		mixture (charging and discharging) at h	ion-dedicated facilities
Product (article) chara			
Physical form of produc		Liquid	
Concentration of substa	nce in product	≤ 100 %	
Amount used (or cont	ained in articles), frequency a	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organis	ational conditions and meas	ures	
Provide a good standar	d of general ventilation (not less	s than 1 to 3 air changes per hour)	
	n - efficiency of at least		80 %
Supervision in place to operation		t measures in place are being used	
	ting workers exposure		
ndoor	ang nomero expedenc		
Maximum process temp	erature		≤ 56 °C
		ance or mixture (charging and discha	rging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or	mixture (charging and discharging) at d	ledicated facilities
Product (article) chara	cteristics		
Physical form of produc		Liquid	
Concentration of substa		≤ 100 %	
	·	and duration of use/exposure	
Exposure duration	amed in articles), frequency a	≤ 8 h/day	
•			
	ational conditions and meas		20.04
Provide a good standar Efficiency	וט ג general ventilation (not less	s than 3 to 5 air changes per hour).	30 %
Supervision in place to		t measures in place are being used	
correctly and operation			
Other conditions affect	ting workers exposure		
ndoor			
Maximum process temp			≤ 56 °C
		· · · · · · · · · · · · · · · · · · ·	rging) at dedicated facilities (PROC8b)
PROC8b	I ranster of substance or	mixture (charging and discharging) at d	legicated facilities
Product (article) chara	t ————	Liquid	
Product (article) chara Physical form of produc		≤ 100 %	
	nce in product	= 100 70	
Physical form of produc Concentration of substa	·	and duration of use/exposure	
Physical form of produc Concentration of substa	·		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Technical and organisational conditions and measur	es				
Supervision in place to check that the risk management measures in place are being used					
correctly and operation conditions followed.					
Other conditions affecting workers exposure					
outdoor					
Maximum process temperature		≤ 56 °C			
8.2.10. Control of worker exposure: Transfer of substa					
	nixture (charging and discharging) at de	dicated facilities			
Product (article) characteristics					
Physical form of product	Liquid				
Concentration of substance in product	≤ 100 %				
Amount used (or contained in articles), frequency ar	· ·				
Exposure duration	≤ 8 h/day				
Technical and organisational conditions and measur	es				
Provide a good standard of general ventilation (not less	than 1 to 3 air changes per hour)				
Local exhaust ventilation - efficiency of at least		90 %			
Local exhaust ventilation - efficiency of at least		Inhalation 80 %			
Zeedi ownade vermanen emeleney er at loadt		Dermal			
Supervision in place to check that the risk management correctly and operation conditions followed.	measures in place are being used				
Other conditions affecting workers exposure					
indoor					
Maximum process temperature		≤ 56 °C			
l8.2.11. Control of worker exposure: Transfer of substa PROC9)	nce or mixture into small containers	(dedicated filling line, including weighing)			
PROC9 Transfer of substance or p	preparation into small containers (dedica	ted filling line, including weighing)			
Product (article) characteristics					
Physical form of product	Liquid				
Concentration of substance in product	≤ 100 %				
Amount used (or contained in articles), frequency ar	d duration of use/exposure				
Exposure duration	≤ 8 h/day				
Technical and organisational conditions and measur	res				
Supervision in place to check that the risk management correctly and operation conditions followed.					
Other conditions affecting workers exposure					
outdoor					
Maximum process temperature		≤ 56 °C			
8.2.12. Control of worker exposure: Transfer of substa	nce or mixture into small containers	(dedicated filling line, including weighing)			
PROC9 Transfer of substance or p	preparation into small containers (dedica	tod filling line, including weighing)			
·	preparation into small containers (dedica	ted miling line, including weighing)			
Product (article) characteristics Physical form of product	Liquid				
Concentration of substance in product	≤ 100 %				
Amount used (or contained in articles), frequency and duration of use/exposure					
Exposure duration	≤ 8 h/day				
Technical and organisational conditions and measur					
Provide a good standard of general ventilation (not less	than 3 to 5 air changes per hour).	30 %			
Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.					
Other conditions affecting workers exposure					
indoor					
Maximum process temperature		≤ 56 °C			

203/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

18.2.13. Control of worker exposure: Transfer of substance or mixture into small containers (dedicated filling line, including weighing)

PROC9	Transfer of substar	nce or preparation into small containers (dedic	cated filling line, including weighing)
Product (article) charact	teristics		
Physical form of product	10110100	Liquid	
Concentration of substance	ce in product	≤ 100 %	
	•		
	ned in articles), freque	ency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisat	tional conditions and n	neasures	
	, , , , , , , , , , , , , , , , , , ,	ot less than 1 to 3 air changes per hour)	
Local exhaust ventilation - Supervision in place to ch correctly and operation co	neck that the risk manage	ement measures in place are being used	80 %
Other conditions affection	ng workers exposure		
indoor			
Maximum process temper	rature		≤ 56 °C
2.14. Control of worker	exposure: Tabletting, o	compression, extrusion, pelettisation, gra	nulation (PROC14)
PROC14	Tabletting, compres	ssion, extrusion, pelettisation, granulation	
Product (article) charact	teristics	-	
Physical form of product		Liquid	
Concentration of substance	ce in product	≤ 100 %	
	· · · · · · · · · · · · · · · · · · ·		
•	ned in articles), freque	ency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisat	tional conditions and n	neasures	
Supervision in place to ch correctly and operation co		ement measures in place are being used	
Conditions and measure	es related to personal	protection, hygiene and health evaluation	
Wear a respirator providin	ng a minimum efficiency	of (%):	90 %
	,	of (%):	90 % (APF 10)
Other conditions affection	,	of (%):	
Other conditions affections affections and/or,outdoor	ng workers exposure	of (%):	(APF 10)
Other conditions affection indoor, and/or, outdoor Maximum process temper	ng workers exposure	· ,	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker	ng workers exposure rature exposure: Tabletting, o	compression, extrusion, pelettisation, gra	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker	ng workers exposure rature exposure: Tabletting, o	· ,	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14	ng workers exposure rature exposure: Tabletting, compres	compression, extrusion, pelettisation, gra	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14 Product (article) charact	ng workers exposure rature exposure: Tabletting, compres	compression, extrusion, pelettisation, gra	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product	ng workers exposure rature exposure: Tabletting, of Tabletting, compressions	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance	ng workers exposure rature exposure: Tabletting, compresenteristics ce in product	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain	ng workers exposure rature exposure: Tabletting, compresenteristics ce in product	compression, extrusion, pelettisation, granulation ssion, extrusion, pelettisation, granulation Liquid ≤ 100 %	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration	ng workers exposure rature exposure: Tabletting, compres teristics ce in product ned in articles), freque	compression, extrusion, pelettisation, granulation ssion, extrusion, pelettisation, granulation Liquid ≤ 100 % cncy and duration of use/exposure ≤ 8 h/day	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisate	ng workers exposure rature exposure: Tabletting, compres teristics ce in product ned in articles), freque	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard or	ng workers exposure rature exposure: Tabletting, comprese teristics ce in product ned in articles), freque tional conditions and more general ventilation (no	compression, extrusion, pelettisation, granulation ssion, extrusion, pelettisation, granulation Liquid ≤ 100 % cncy and duration of use/exposure ≤ 8 h/day	(APF 10) ≤ 56 °C nulation (PROC14)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation	ng workers exposure rature exposure: Tabletting, compress teristics ce in product ned in articles), freque tional conditions and more general ventilation (note) - efficiency of at least neck that the risk manager	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures	(APF 10) ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contained Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation Supervision in place to characting indoor correctly and operation contained to the correctly and operation contained in the correctly and	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), freque tional conditions and re of general ventilation (note) - efficiency of at least neck that the risk manage conditions followed.	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	(APF 10) ≤ 56 °C nulation (PROC14)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation cool Other conditions affecting the substance of the conditions affecting the supervision in place to che correctly and operation cool of the conditions affecting the supervision in place to che conditions affecting the supervision in the supervision in place to che conditions affecting the supervision in t	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), freque tional conditions and re of general ventilation (note) - efficiency of at least neck that the risk manage conditions followed.	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	(APF 10) ≤ 56 °C nulation (PROC14)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation Supervision in place to charactly and operation cood Other conditions affecting indoor	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), freque tional conditions and mof general ventilation (notes that the risk manage and itions followed. ng workers exposure	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	(APF 10) ≤ 56 °C nulation (PROC14)
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation coordinate Other conditions affection indoor Maximum process temper	ng workers exposure rature exposure: Tabletting, compress teristics ce in product ned in articles), freque tional conditions and re of general ventilation (note) - efficiency of at least neck that the risk manage conditions followed. ng workers exposure	compression, extrusion, pelettisation, granussion, extrusion, pelettisation, granulation Liquid ≤ 100 % ency and duration of use/exposure ≤ 8 h/day measures ot less than 1 to 3 air changes per hour)	(APF 10) ≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation coorectly and operation coorect	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), frequentional conditions and mof general ventilation (note: efficiency of at least neck that the risk manage anditions followed. ng workers exposure rature exposure: Tabletting, of	compression, extrusion, pelettisation, granulation ssion, extrusion, pelettisation, granulation Liquid ≤ 100 % cocy and duration of use/exposure ≤ 8 h/day measures ot less than 1 to 3 air changes per hour) ement measures in place are being used	(APF 10) ≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker of PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisate Provide a good standard of Local exhaust ventilation Supervision in place to charactly and operation concentration of Control of Worker (Daximum process temper 2.16. Control of worker (PROC14)	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), freque tional conditions and not general ventilation (note of general ventilation (note of general ventilation) (note of gene	compression, extrusion, pelettisation, granulation Liquid ≤ 100 %	(APF 10) ≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C
Other conditions affection indoor, and/or, outdoor Maximum process temper 2.15. Control of worker PROC14 Product (article) charact Physical form of product Concentration of substance Amount used (or contain Exposure duration Technical and organisat Provide a good standard of Local exhaust ventilation Supervision in place to che correctly and operation coordinate Other conditions affection indoor Maximum process temper	ng workers exposure rature exposure: Tabletting, of Tabletting, compress teristics ce in product ned in articles), freque tional conditions and not general ventilation (note of general ventilation (note of general ventilation) (note of gene	compression, extrusion, pelettisation, granulation Liquid ≤ 100 %	(APF 10) ≤ 56 °C nulation (PROC14) 80 % ≤ 56 °C

08/08/2022 (Revision date) IE - en 204/265

	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	es	
	k that the risk management	air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ıre		≤ 56 °C
<u> </u>		ession, extrusion, pelettisation, gran	ulation (PROC14)
PROC14	Tabletting, compression, e	extrusion, pelettisation, granulation	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 5 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	es	
		than 1 to 3 air changes per hour)	
	<u> </u>	measures in place are being used	
correctly and operation cond	itions followed.	· · · · · ·	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ıre		≤ 56 °C
·		ng and maintenance (PROC8a, PROC	<u> </u>
PROC8a		nixture (charging and discharging) at no	on-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	es	
Provide a good standard of o	controlled ventilation (5 to 10 k that the risk management	air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting			
indoor			
Maximum process temperatu	ıre		≤ 56 °C
3.2.19. Control of worker exp	oosure: Equipment cleanir	ng and maintenance (PROC8a, PROC	228)
PROC8a	Transfer of substance or r	nixture (charging and discharging) at no	on-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
	•	nd duration of use/exposure	
Exposure duration	a in articles), frequency ar	≤ 8 h/day	
•	al conditions or I was	•	
Technical and organisation			
Local exhaust ventilation - ef	<u> </u>	than 1 to 3 air changes per hour)	80 %
	k that the risk management	measures in place are being used	00 /6
Other conditions affecting	workers exposure		
indoor			
Maximum process temperatu	ıre		≤ 56 °C
/08/2022 (Revision date)		IE - en	205/26

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

8.2.20. Control of works	er exposure: Equipment cleanii	ng and maintenance (PROC8a, PROC	28)		
PROC8a	Transfer of substance or r	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities			
PROC28	Manual maintenance (clea	aning and repair) of machinery			
Product (article) chara	acteristics				
Physical form of produc	t	Liquid			
Concentration of substa	ance in product	≤ 100 %			
Amount used (or cont	ained in articles), frequency ar	nd duration of use/exposure			
Exposure duration		≤ 8 h/day			
Technical and organis	sational conditions and measur	res			
Supervision in place to correctly and operation		measures in place are being used			
Conditions and measu	ures related to personal protec	tion, hygiene and health evaluation			
Wear a respirator providing a minimum efficiency of (%): 90 % (APF 10)					
Other conditions affect	cting workers exposure				
indoor,and/or,Outdoor					
Maximum process temperature ≤ 56 °C					
8.3. Exposure estimation and reference to its source					
8.3.1. Environmental release and exposure Use in polymer processing (ERC8a, ERC8d)					
Release route Release rate Release estimation method					

Release route	Release rate	Release estimation method
Release fraction to wastewater	100 %	ERC
Release to waste water from process	21.32 kg/day	ERC
Release fraction to air from process	100 %	ERC
Release fraction to soil from process	20 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.881	10.6	0.083	EUSES v2.1.2
Marine water	mg/l	0.083	1.06	0.078	EUSES v2.1.2
Freshwater sediment	mg/kg	3.863	30.4	0.127	EUSES v2.1.2
Marine water sediment	mg/kg	0.365	3.04	0.12	EUSES v2.1.2
Sewage treatment plant	mg/l	1.327	100	0.013	EUSES v2.1.2
Soil	mg/kg	0.042	29.5	0.001	EUSES v2.1.2

Release route	Release rate	Release estimation method
Release fraction to wastewater	30 %	Worst case assumption
Release to waste water from process	6.395 kg/day	Worst case assumption
Release fraction to air from process	15 %	ERC
Release fraction to soil from process	0.5 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.788	10.6	0.074	EUSES v2.1.2
Marine water	mg/l	0.074	1.06	0.07	EUSES v2.1.2
Freshwater sediment	mg/kg	3.455	30.4	0.114	EUSES v2.1.2
Marine water sediment	mg/kg	0.324	3.04	0.107	EUSES v2.1.2
Sewage treatment plant	mg/l	0.398	100	0.004	EUSES v2.1.2
Soil	mg/kg	0.029	29.5	0.001	EUSES v2.1.2

18.3.3. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m³	0	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 206/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

18.3.4. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or process
with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method		
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker		
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker		
Sum RCR - Long-term - systemic effects		0.107			
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker		
8.3.5. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)					

18

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

18.3.6. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker

18.3.7. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

18.3.8. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker

18.3.9. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

18.3.10. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m ³	0.05	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 207/265

systemic effects Acute - Local - Inhalation 3.11. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	242 mg/m³ er of substance or mixture into s Exposure estimate	0.1	
3.11. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term -	er of substance or mixture into s	1 -	ECETOC TRA worker
Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term -		small containers (dedicated filling line.	
effects Inhalation - Long-term - systemic effects Sum RCR - Long-term -		RCR	Method
systemic effects Sum RCR - Long-term -	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Sum RCR - Long-term -	423.5 mg/m³	0.35	ECETOC TRA worker
		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.12. Worker exposure Transfe	r of substance or mixture into s	small containers (dedicated filling line,	including weighing) (PROC9)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
·		small containers (dedicated filling line,	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.372 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	40.4	0.107	FOFTOO TDA
Acute - Local - Inhalation	484 mg/m³	0.2 lettisation, granulation (PROC14)	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic	3.43 mg/kg bw/day	0.018	ECETOC TRA worker
effects Inhalation - Long-term -	121 mg/m³	0.1	ECETOC TRA worker
systemic effects Sum RCR - Long-term - systemic effects		0.118	
-	484 mg/m³	0.2	ECETOC TRA worker
Acute - Local - Inhalation			
Acute - Local - Inhalation 3.15. Worker exposure Tabletti	ing, compression, extrusion, per	lettisation, granulation (PROC14)	
3.15. Worker exposure Tabletti	Exposure estimate	RCR	Method
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic			Method ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term -	Exposure estimate	RCR	
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects	Exposure estimate 0.686 mg/kg bw/day	RCR 0.004	ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³	0.004 0.2 0.204 0.4	ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14)	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³	0.004 0.2 0.204 0.4	ECETOC TRA worker ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate 3.43 mg/kg bw/day	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14)	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14) RCR 0.018 0.3	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate 3.43 mg/kg bw/day 363 mg/m³	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14) RCR 0.018 0.3 0.318	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate 3.43 mg/kg bw/day 363 mg/m³	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14) RCR 0.018 0.3 0.318 0.599	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.17. Worker exposure Tabletti Route of exposure Tabletti	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate 3.43 mg/kg bw/day 363 mg/m³	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14) RCR 0.018 0.3 0.318	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
3.15. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Tabletti Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.17. Worker exposure Tabletti	Exposure estimate 0.686 mg/kg bw/day 242 mg/m³ 968 mg/m³ ing, compression, extrusion, pel Exposure estimate 3.43 mg/kg bw/day 363 mg/m³ 1450 mg/m³ ing, compression, extrusion, pel	RCR 0.004 0.2 0.204 0.4 lettisation, granulation (PROC14) RCR 0.018 0.3 0.318 0.599 lettisation, granulation (PROC14)	ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	· · ·	**	
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
.3.18. Worker exposure Equipm	ent cleaning and maintenance (I	PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
.3.19. Worker exposure Equipm	ent cleaning and maintenance (I	PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
	ent cleaning and maintenance (l		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.4. Guidance to Downstro	eam User to evaluate whe	ther he works inside the bou	Indaries set by the ES
.4.1. Environment			
Guidance - Environment	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for environment.		e mentioned above, are needed to
.4.2. Health			
		nent measures, besides those that are	e mentioned above, are needed to

08/08/2022 (Revision date) IE - en 209/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

19. AC SE19: Use in Cleaning Agents

Use in Cleaning Agents	ES	S Ref.: AC SE19 Association ref code: F
	E	S Type: Worker
Environment		
CS 1	Use in Cleaning Agents	ERC8a
Worker		
CS 2	Use in closed process; Storage	PROC1
CS 3	Chemical production or refinery in closed continuous process with occasional controlled exposure or proce with equivalent containment conditions	PROC2
CS 4	Use in closed batch process (synthesis or formulation With occasional controlled exposure	n); PROC3
CS 5	Chemical production where opportunity for exposure arises	PROC4
CS 6	Chemical production where opportunity for exposure arises	PROC4
CS 7	Mixing or blending in batch processes	PROC5
CS 8	Mixing or blending in batch processes	PROC5
CS 9	Mixing or blending in batch processes	PROC5
CS 10	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 11	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 12	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 13	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 14	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 15	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	s PROC9
CS 16	Transfer of substance or mixture into small containers (dedicated filling line, including weighing)	s PROC9
CS 17	Roller application or brushing	PROC10
CS 18	Roller application or brushing	PROC10
CS 19	Roller application or brushing	PROC10
CS 20	Spraying	PROC11
CS 21	Spraying	PROC11
CS 22	Treatment of articles by dipping and pouring	PROC13
CS 23	Treatment of articles by dipping and pouring	PROC13
CS 24	Manual activities involving hand contact	PROC19
CS 25	Manual activities involving hand contact	PROC19
CS 26	Manual activities involving hand contact	PROC19
CS 27	Equipment cleaning and maintenance	PROC8a, PROC28
CS 28	Equipment cleaning and maintenance	PROC8a, PROC28
CS 29	Equipment cleaning and maintenance	PROC8a, PROC28

19.2. Conditions of use affecting exposure

posure: Use in Cleaning Agents (ERC8a)

13.2. I. Control of Citylionin	iental exposure. Ose in oleaning Agents (Errosa)	
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)	
Amount used, frequency	y and duration of use (or from service life)	
Amounts used	≤ 0.021 t/d	
Conditions and measures related to sewage treatment plant		
Municipal Sewage Treatm	nent Plant	

08/08/2022 (Revision date) IE - en 210/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Conditions and measures r	elated to treatment of wa	ste (including article waste)	
Dispose of waste in accordar legislation		, and the same same same same same same same sam	
2.2. Control of worker expo	sure: Use in closed proc	ess; Storage (PROC1)	
PROC1	Chemical production or recontainment conditions	efinery in closed process without likeliho	ood of exposure or processes with equivalent
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	l in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measu	res	
with equivalent containment	conditions that the risk management	ut likelihood of exposure or processes measures in place are being used	
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperatu	re		≤ 60 °C
			process with occasional controlled exposure
pcesses with equivalent co	<u> </u>	efinery in closed continuous process wit	th occasional controlled exposure or processes
Product (article) characteri	etice		
Physical form of product	31103	Liquid	
Concentration of substance in	n product	≤ 100 %	
	•		
•	in articles), frequency a	nd duration of use/exposure ≤ 8 h/day	
Exposure duration		,	
exposure or processes with e	ery in closed continuous pro equivalent containment con that the risk management	ocess with occasional controlled	
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperatu	re		≤ 60 °C
2.4. Control of worker expo	sure: Use in closed batc	h process (synthesis or formulation)	; With occasional controlled exposure
PROC3		on in the chemical industry in closed bat ent containment condition	tch processes with occasional controlled exposul
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	I in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measu	res	
		With occasional controlled exposure	
	that the risk management	measures in place are being used	
	workers exposure		
correctly and operation condi	normore expecure		
Supervision in place to check correctly and operation conditions affecting indoor, and/or, outdoor	mornoro expedicio		
correctly and operation condi Other conditions affecting	·		≤ 60 °C
correctly and operation condi Other conditions affecting ndoor,and/or,outdoor Maximum process temperatu	re	on where opportunity for exposure a	

08/08/2022 (Revision date) IE - en 211/265

Product (article) characteristics			
Physical form of product	Liquid		
Concentration of substance in produc	ıt	≤ 100 %	
Amount used (or contained in artic	les), frequency and	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisational cond	itions and measure	es	
Provide a good standard of general ve	entilation (not less th	nan 3 to 5 air changes per hour).	30 %
Efficiency Supervision in place to check that the	risk management n	neasures in place are being used	
correctly and operation conditions followed	•	neasures in place are being asea	
Other conditions affecting workers	exposure		
indoor			
Maximum process temperature			≤ 60 °C
.2.6. Control of worker exposure: C	hemical production	n where opportunity for exposure a	rises (PROC4)
PROC4 Chemic	cal production where	e opportunity for exposure arises	
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in produc	:t	≤ 100 %	
Amount used (or contained in artic	les), frequency and	d duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
Technical and organisational cond	itions and measur	ne ne	
Provide a good standard of general ve			
Local exhaust ventilation - efficiency of	·	ian i to o an changes per nour	80 %
Supervision in place to check that the		neasures in place are being used	00 70
correctly and operation conditions foll	owed.		
Other conditions affecting workers	exposure		
indoor			
Maximum process temperature			≤ 60 °C
2.2.7. Control of worker exposure: M			
PROC5 Mixing	or blending in batch	processes	
Product (article) characteristics			
Physical form of product		Liquid	
Concentration of substance in produc	t	≤ 100 %	
Amount used (or contained in artic	les), frequency and	d duration of use/exposure	
Exposure duration			
		≤ 8 h/day	
Technical and organisational cond	itions and measure	·	
Technical and organisational cond Supervision in place to check that the		es .	
<u> </u>	risk management n	es .	
Supervision in place to check that the	e risk management n lowed.	es neasures in place are being used	
Supervision in place to check that the correctly and operation conditions follows:	e risk management n lowed. o personal protecti	es neasures in place are being used	90 % (APE 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum	e risk management n lowed. o personal protecti m efficiency of (%):	es neasures in place are being used	90 % (APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers	e risk management n lowed. o personal protecti m efficiency of (%):	es neasures in place are being used	
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor	e risk management n lowed. o personal protecti m efficiency of (%):	es neasures in place are being used	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature	e risk management n lowed. o personal protecti m efficiency of (%): s exposure	neasures in place are being used	
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: M	e risk management nowed. o personal protection efficiency of (%): s exposure	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5)	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing	e risk management n lowed. o personal protecti m efficiency of (%): s exposure	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5)	(APF 10)
Supervision in place to check that the correctly and operation conditions followed to conditions and measures related to the wear a respirator providing a minimum of the conditions affecting workers indoor, and/or, outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics	e risk management nowed. o personal protection efficiency of (%): s exposure	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature .2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics Physical form of product	e risk management nowed. o personal protection efficiency of (%): s exposure lixing or blending if or blending in batch	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: M PROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product	e risk management nowed. o personal protection efficiency of (%): s exposure lixing or blending if or blending in batch	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 %	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in artice)	e risk management nowed. o personal protection efficiency of (%): s exposure lixing or blending if or blending in batch	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 % d duration of use/exposure	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product	e risk management nowed. o personal protection efficiency of (%): s exposure lixing or blending if or blending in batch	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 %	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum Other conditions affecting workers indoor,and/or,outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in artice)	e risk management nowed. o personal protection of personal protection of the personal protection of t	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum other conditions affecting workers indoor, and/or, outdoor Maximum process temperature 2.8. Control of worker exposure: MPROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in artice Exposure duration	e risk management nowed. o personal protection of personal protection of personal protection of personal protection of the personal protection of the personal protection of the personal perso	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	(APF 10)
Supervision in place to check that the correctly and operation conditions foll Conditions and measures related to Wear a respirator providing a minimum other conditions affecting workers indoor, and/or, outdoor Maximum process temperature 2.8. Control of worker exposure: Maximum PROC5 Mixing Product (article) characteristics Physical form of product Concentration of substance in product Amount used (or contained in artice exposure duration Technical and organisational conditions	e risk management nowed. o personal protection of personal protection of personal protection of personal protection of the personal protection of the personal protection of the personal perso	neasures in place are being used ion, hygiene and health evaluation n batch processes (PROC5) processes Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	(APF 10)

		d Substance type: Mono-constituent	
Supervision in place to che correctly and operation cor		measures in place are being used	
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera	ature		≤ 60 °C
.2.9. Control of worker ex	posure: Mixing or blending	in batch processes (PROC5)	
PROC5	Mixing or blending in bate	ch processes	
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and measu	res	
Provide a good standard o	f controlled ventilation (5 to 1 eck that the risk management	0 air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera	ature		≤ 60 °C
.2.10. Control of worker e	exposure: Transfer of subst	ance or mixture (charging and disch	arging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or	mixture (charging and discharging) at n	on-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration	,,,	≤ 8 h/day	
•	onal conditions and measu	•	
	eck that the risk management	measures in place are being used	
Conditions and measure	s related to personal protec	ction, hygiene and health evaluation	
Wear a respirator providing	g a minimum efficiency of (%)	:	90 % (APF 10)
Other conditions affecting	g workers exposure		
indoor,and/or,Outdoor			
Maximum process tempera			≤ 60 °C
		<u> </u>	arging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or	mixture (charging and discharging) at n	non-dedicated facilities
Product (article) characte	eristics		
Physical form of product		Liquid	
Concentration of substance	e in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisati	onal conditions and measu	res	
	eck that the risk management	0 air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting indoor	g workers exposure		
Maximum process tempera	ature		≤ 60 °C
•		ance or mixture (charging and disch	arging) at non-dedicated facilities (PROC8a)
PROC8a		mixture (charging and discharging) at n	
Product (article) characte	eristics	Limited	
Physical form of product	o in product	Liquid	
Concentration of substance	e in product	≤ 100 %	
3/08/2022 (Revision date)		IE - en	213/26

Amount used (or containe	ed in articles), frequency an	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measur	res	
		than 1 to 3 air changes per hour)	
Local exhaust ventilation - 6	• '	indir i to o dir oriangeo per medir	80 %
	ck that the risk management	measures in place are being used	00 /0
Other conditions affecting	y workers exposure		
indoor			
Maximum process tempera	ture		≤ 60 °C
.2.13. Control of worker ex	posure: Transfer of substa	ance or mixture (charging and disch	arging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or r	mixture (charging and discharging) at d	edicated facilities
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contains	ed in articles) frequency ar	nd duration of use/exposure	
Exposure duration	s. s. s. soj, noquency di	≤ 8 h/day	
•	mal aqualiticas are larger	•	
	onal conditions and measur		20.0/
Efficiency	general ventilation (not less	than 3 to 5 air changes per hour).	30 %
,		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process tempera	ure		≤ 60 °C
.2.14. Control of worker ex	posure: Transfer of substa	ance or mixture (charging and disch	arging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or r	nixture (charging and discharging) at d	edicated facilities
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency ar	nd duration of use/exposure	
Exposure duration	,	≤ 8 h/day	
Toohnical and arganization	anal conditions and massau	•	
	onal conditions and measur	than 1 to 3 air changes per hour)	
	·	trian 1 to 5 air changes per nour)	90 %
Local exhaust ventilation - efficiency of at least			Inhalation
Local exhaust ventilation - efficiency of at least			80 %
Supervision in place to check that the risk management measures in place are being used		Dermal	
correctly and operation con-		g acca	
Other conditions affecting	workers exposure		
indoor			
Maximum process tempera	ture		≤ 60 °C
	posure: Transfer of substa	ance or mixture into small containers	s (dedicated filling line, including weighing)
ROC9)			
PROC9	Transfer of substance or p	preparation into small containers (dedic	cated filling line, including weighing)
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contains	ed in articles), frequency ar	nd duration of use/exposure	
Amount asca (or containe		≤ 8 h/day	
Exposure duration		1	
Exposure duration	nal conditions and measur	res	
Exposure duration Technical and organisation	onal conditions and measur		30 %
Exposure duration Technical and organisation		res than 3 to 5 air changes per hour).	30 %
Exposure duration Technical and organisation Provide a good standard of Efficiency	general ventilation (not less		30 %

Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera			≤ 60 °C
9.2.16. Control of worker e	xposure: Transfer of subst	ance or mixture into small container	s (dedicated filling line, including weighing)
PROC9	Transfer of substance or	preparation into small containers (dedic	cated filling line, including weighing)
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	onal conditions and measu	ires	
Provide a good standard of	general ventilation (not less	than 1 to 3 air changes per hour)	
Local exhaust ventilation - Supervision in place to che correctly and operation corr	ck that the risk management	measures in place are being used	80 %
Other conditions affecting	g workers exposure		
indoor			
Maximum process tempera	iture		≤ 60 °C
9.2.17. Control of worker e	xposure: Roller application	or brushing (PROC10)	
PROC10	Roller application or brus	hing	
Product (article) characte	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or contain	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Supervision in place to che correctly and operation con	ck that the risk management nditions followed.	0 air changes per hour). Efficiency measures in place are being used	70 %
Other conditions affecting	g workers exposure		
indoor	4		4.00 °C
Maximum process tempera		or brushing (PROC40)	≤ 60 °C
PROC10	xposure: Roller application Roller application or brus		
	· ·	9	
Product (article) character Physical form of product	ristics	Limited	
Concentration of substance	n in product	Liquid ≤ 100 %	
	•		
`	ed in articles), frequency a	nd duration of use/exposure	
Exposure duration		≤ 8 h/day	
Provide a good standard of Local exhaust ventilation - Supervision in place to che correctly and operation cor Other conditions affecting	efficiency of at least cck that the risk management aditions followed.	than 1 to 3 air changes per hour) measures in place are being used	80 %
indoor			
Maximum process tempera		(550010)	≤ 60 °C
	xposure: Roller application		
PROC10	Roller application or brus	Tillig	
Product (article) characte	ristics		
Physical form of product	a the man decad	Liquid	
Concentration of substance	n product	≤ 100 %	
3/08/2022 (Revision date)		IE - en	215/2

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

PROC13 Product (article) characte Physical form of product	-	Liquid	
PROC13 Product (article) characte	-		
PROC13	-		
	reatment of articles by	dipping and pouring	
A AA A A A A A A A A A A A A A A A A A		icles by dipping and pouring (PROC1:	3)
Maximum process tempera			≤ 60 °C
Indoors,Assumes large wor		ose to buildings (< 4 m)	
Other conditions affecting			
			(EN 374)
Wear gloves providing a mi	nimum efficiency of (%):		(APF 10) 80 %
Wear a respirator providing	a minimum efficiency of (%	s):	90 %
Conditions and measures	related to personal prote	ection, hygiene and health evaluation	
correctly and operation con			
		r downward. It measures in place are being used	
Surface spraying of liquids. Ensure that direction of app			
	onal conditions and meas		
	,		
Exposure duration Moderate application rate (() 3 - 3 l/minute)	≤ 8 h/day	
	o in articles), frequency a	and duration of use/exposure	
	•		
Concentration of substance	in product	≤ 100 %	
Physical form of product	13003	Liquid	
Product (article) characte	. , ,		
PROC11	Non industrial spraying		
2.21. Control of worker ex		11)	
Maximum process tempera			≤ 56 °C
Other conditions affecting Indoors, Assumes large wor	•		
correctly and operation con			
		t measures in place are being used	
	lication is only horizontal or		
	Spraying with no or low cor	mpressed air use	OU /0
Provide a good standard of Local exhaust ventilation - e	` `	s than 1 to 3 air changes per hour)	80 %
Technical and organisation			
	,		
Exposure duration Moderate application rate (() 3 - 3 l/minute)	- o ii/uay	
Amount used (or contained Exposure duration	ou in articles), frequency a	and duration of use/exposure ≤ 8 h/day	
	•		
Physical form of product Concentration of substance	in product	Liquid ≤ 100 %	
Product (article) characte	IISUUS	Liquid	
	, , ,		
PROC11	Non industrial spraying		
Maximum process tempera 2.20. Control of worker ex		11)	≥ 60 C
indoor,and/or,Outdoor	turo		≤ 60 °C
Other conditions affecting	y workers exposure		
			(APF 10)
Wear a respirator providing		· ·	90 %
		ection, hygiene and health evaluation	'
Supervision in place to ched correctly and operation con		nt measures in place are being used	
	onal conditions and measi		
		≤ 8 h/day	
Exposure duration		< 9 h/day	
Exposure duration		10171	

08/08/2022 (Revision date) IE - en 216/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Concentration of substance			
	in product	≤ 100 %	
Amount used (or contains	d in articles) frequency an	d duration of use/exposure	
Exposure duration	a in articles), frequency an	≤ 8 h/day	
•	l P.C	•	
	nal conditions and measur		20.07
Efficiency	general ventilation (not less t	han 3 to 5 air changes per hour).	30 %
		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperat	ure		≤ 60 °C
.2.23. Control of worker ex	posure: Treatment of articl	es by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
	<u>'</u>		
	a in articles), frequericy an	d duration of use/exposure ≤ 8 h/day	
Exposure duration		,	
	nal conditions and measur		
	` `	han 1 to 3 air changes per hour)	
Local exhaust ventilation - e		measures in place are being used	80 %
correctly and operation cond		measures in place are being used	
Other conditions affecting	workers exposure		
indoor			
Maximum process temperat	ure		≤ 60 °C
.2.24. Control of worker ex	posure: Manual activities i	nvolving hand contact (PROC19)	
PROC19	Manual activities involving	hand contact	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	· ≤ 100 %	
A	d in articles) frequency an	d duration of use/exposure	
· ·	u iii articles), frequency an		
Exposure duration		≤ 8 h/day	
Exposure duration Technical and organisatio	nal conditions and measur	≤ 8 h/day es	
Exposure duration Technical and organisatio Provide a good standard of	nal conditions and measur general ventilation (not less t	≤ 8 h/day	
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e	nal conditions and measur general ventilation (not less t fficiency of at least	≤ 8 h/day es than 1 to 3 air changes per hour)	80 %
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to chec	nal conditions and measur general ventilation (not less t efficiency of at least that the risk management i	≤ 8 h/day es	80 %
Exposure duration Technical and organisatio Provide a good standard of the control of the cont	nal conditions and measur general ventilation (not less t fficiency of at least k that the risk management r ditions followed.	≤ 8 h/day es than 1 to 3 air changes per hour)	80 %
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to chec correctly and operation cond Conditions and measures	nal conditions and measur general ventilation (not less t officiency of at least that the risk management i ditions followed.	≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used	80 %
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checo correctly and operation cond Conditions and measures	nal conditions and measur general ventilation (not less t officiency of at least that the risk management i ditions followed.	≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used	
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a min	nal conditions and measur general ventilation (not less t ifficiency of at least sk that the risk management i ditions followed. related to personal protect nimum efficiency of (%):	≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used	80 %
Exposure duration Technical and organisatio Provide a good standard of the control of the cont	nal conditions and measur general ventilation (not less t ifficiency of at least sk that the risk management i ditions followed. related to personal protect nimum efficiency of (%):	≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation concomments of the conditions and measures Wear gloves providing a mire of the conditions affecting indoor Maximum process temperate	nal conditions and measur general ventilation (not less to efficiency of at least sk that the risk management of ditions followed. related to personal protect nimum efficiency of (%): workers exposure	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation	80 %
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker ex	nal conditions and measur general ventilation (not less to efficiency of at least sk that the risk management of ditions followed. related to personal protect nimum efficiency of (%): workers exposure	≤ 8 h/day es than 1 to 3 air changes per hour) measures in place are being used	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker ex	nal conditions and measur general ventilation (not less to efficiency of at least sk that the risk management of ditions followed. related to personal protect nimum efficiency of (%): workers exposure	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker expression	nal conditions and measur general ventilation (not less to efficiency of at least ek that the risk management re ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities in Manual activities involving	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker exPROC19 Product (article) character	nal conditions and measur general ventilation (not less to efficiency of at least ek that the risk management re ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities in Manual activities involving	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to checorrectly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker ex PROC19 Product (article) character Physical form of product	nal conditions and measur general ventilation (not less t ifficiency of at least isk that the risk management i ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities i Manual activities involving	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to chec correctly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat .2.25. Control of worker ex PROC19 Product (article) character Physical form of product Concentration of substance	nal conditions and measur general ventilation (not less to efficiency of at least ek that the risk management re ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities in Manual activities involving ristics in product	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact Liquid ≤ 100 %	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of Local exhaust ventilation - e Supervision in place to checorrectly and operation cond Conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperat 2.25. Control of worker ex PROC19 Product (article) character Physical form of product Concentration of substance Amount used (or containe	nal conditions and measur general ventilation (not less to efficiency of at least ek that the risk management re ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities in Manual activities involving ristics in product	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure	80 % (EN 374)
Exposure duration Technical and organisatio Provide a good standard of a Local exhaust ventilation - e Supervision in place to chec correctly and operation conditions and measures Wear gloves providing a mir Other conditions affecting indoor Maximum process temperate. 2.25. Control of worker exproduct (article) character Physical form of product Concentration of substance Amount used (or containe)	nal conditions and measur general ventilation (not less to efficiency of at least ek that the risk management re ditions followed. related to personal protect nimum efficiency of (%): workers exposure ure posure: Manual activities in Manual activities involving ristics in product	es than 1 to 3 air changes per hour) measures in place are being used tion, hygiene and health evaluation nvolving hand contact (PROC19) hand contact Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	80 % (EN 374)

08/08/2022 (Revision date) IE - en 217/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

correctly and operation cond Conditions and measures		tion, hygiene and health evaluation		
Wear gloves providing a minimum efficiency of (%): 80 %				
			(EN 374)	
Other conditions affecting	workers exposure			
indoor				
Maximum process temperat			≤ 60 °C	
		nvolving hand contact (PROC19)		
PROC19	Manual activities involving	hand contact		
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or containe	d in articles), frequency an	d duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisatio	nal conditions and measur	es		
~		measures in place are being used		
correctly and operation cond				
Conditions and measures	related to personal protect	tion, hygiene and health evaluation		
Wear a respirator providing	a minimum efficiency of (%):		90 % (APF 10)	
Other conditions offerting	workers expecting		(AFF 10)	
Other conditions affecting indoor,and/or,Outdoor	workers exposure			
Maximum process temperat	IIIA		≤ 60 °C	
		ng and maintenance (PROC8a, PRO	<u>'</u>	
PROC8a		nixture (charging and discharging) at r		
PROC28		· · · · · · · · · · · · · · · · · · ·	ion-dedicated facilities	
Product (article) character	ristics	11		
Physical form of product Liquid Concentration of substance in product ≤ 100 %				
·				
Amount used (or contained in articles), frequency and duration of use/exposure				
Exposure duration		≤ 8 h/day		
Technical and organisatio	nal conditions and measur	es		
<u> </u>	k that the risk management r	air changes per hour). Efficiency measures in place are being used	70 %	
Other conditions affecting			<u>'</u>	
indoor				
Maximum process temperat	ure		≤ 60 °C	
2.28. Control of worker ex	posure: Equipment cleanir	ng and maintenance (PROC8a, PRO	C28)	
PROC8a	Transfer of substance or n	nixture (charging and discharging) at r	non-dedicated facilities	
PROC28 Manual maintenance (cleaning and repair) of machinery				
Product (article) character	ristics			
Physical form of product		Liquid		
Concentration of substance in product ≤ 100 %				
Amount used (or contained in articles), frequency and duration of use/exposure				
Exposure duration	a in articles), nequency an	≤ 8 h/day		
·				
	nal conditions and measur			
Supervision in place to chec correctly and operation cond	ditions followed.	measures in place are being used		
•		non nyalana ana haalth ayaliiatian		
Conditions and measures	a minimum efficiency of (%):		90 %	

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers exposure	
indoor,and/or,Outdoor	
Maximum process temperature	≤ 60 °C

19.2.29. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)

PROC28 Manual maintenance (cleaning and repair) of machinery	PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
	PROC28	Manual maintenance (cleaning and repair) of machinery

Product (article) characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour)	
Local exhaust ventilation - efficiency of at least	80 %
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	

Other conditions affecting workers exposure

indoor
mass.
Maximum process temperature ≤ 60 °C

19.3. Exposure estimation and reference to its source

19.3.1. Environmental release and exposure Use in Cleaning Agents (ERC8a)

Release route	Release rate	Release estimation method
Release fraction to wastewater	100 %	ERC
Release to waste water from process	21.32 kg/day	ERC
Release fraction to air from process	100 %	ERC
Release fraction to soil from process	0 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.881	10.6	0.083	EUSES v2.1.2
Marine water	mg/l	0.083	1.06	0.078	EUSES v2.1.2
Freshwater sediment	mg/kg	3.863	30.4	0.127	EUSES v2.1.2
Marine water sediment	mg/kg	0.365	3.04	0.12	EUSES v2.1.2
Sewage treatment plant	mg/l	1.327	100	0.013	EUSES v2.1.2
Soil	mg/kg	0.042	29.5	0.001	EUSES v2.1.2

19.3.2. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m³	0	ECETOC TRA worker

19.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 219/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

0.3.4. Worker exposure Use in cl	osed batch process (synthesis or fo	ormulation); With occasional contro	lled exposure (PROC3)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
0.3.5. Worker exposure Chemica	I production where opportunity for	exposure arises (PROC4)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4000 m n/m²	0.387	FOFTOO TDAdi.aa
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
<u> </u>	I production where opportunity for	· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	121 mg/m³	0.1	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	r blending in batch processes (PRO	-	ECETOC TRA Worker
·	·	·	Mariland
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects Sum RCR - Long-term -	121 mg/m³	0.1	ECETOC TRA worker
systemic effects Acute - Local - Inhalation	484 mg/m³	0.174	ECETOC TRA worker
	r blending in batch processes (PRO		EGETGG TTO WORKER
· · · · · · · · · · · · · · · · · · ·	Exposure estimate	· ·	Method
Route of exposure and type of effects	· ·	RCR	
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	060 m a/m 3	0.215	FOFTOC TDA worker
Acute - Local - Inhalation	968 mg/m ³ r blending in batch processes (PRO		ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
.3.10. Worker exposure Transfe	r of substance or mixture (charging	and discharging) at non-dedicated	facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
enecis			

08/08/2022 (Revision date) IE - en 220/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - ystemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
•	· · · · · · · · · · · · · · · · · · ·	_ <u> </u>	non-dedicated facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
nhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
	<u> </u>	0 0	non-dedicated facilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
3.13. Worker exposure Transfe	·		· · · · · · · · · · · · · · · · · · ·
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
3.14. Worker exposure Transfe			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term -	60.5 mg/m ³	0.05	ECETOC TRA worker
systemic effects			
Sum RCR - Long-term - systemic effects		0.065	
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	242 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe	er of substance or mixture into	0.1 small containers (dedicate	ed filling line, including weighing) (PROC9)
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects	er of substance or mixture into Exposure estimate	0.1 o small containers (dedicate RCR	ed filling line, including weighing) (PROC9) Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects	er of substance or mixture into Exposure estimate 6.86 mg/kg bw/day	0.1 D small containers (dedicate RCR 0.037	Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	er of substance or mixture into Exposure estimate	0.1 o small containers (dedicate RCR 0.037 0.35	ed filling line, including weighing) (PROC9) Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³	0.1 o small containers (dedicate RCR 0.037 0.35 0.387	Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³	0.1 o small containers (dedicate RCR 0.037 0.35 0.387 0.698	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe	er of substance or mixture into Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into	0.1 Dismall containers (dedicate RCR 0.037 0.35 0.387 0.698 Dismall containers (dedicate dedicate RCR)	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate	0.1 Dismall containers (dedicate RCR 0.037 0.35 0.387 0.698 Dismall containers (dedicate RCR	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Add filling line, including weighing) (PROC9) Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate 1.372 mg/kg bw/day	0.1 D small containers (dedicate RCR 0.037 0.35 0.387 0.698 D small containers (dedicate RCR 0.007	Method ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term -	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate	0.1 D small containers (dedicate RCR 0.037 0.35 0.387 0.698 D small containers (dedicate RCR 0.007 0.1	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Add filling line, including weighing) (PROC9) Method
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term -	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate 1.372 mg/kg bw/day 121 mg/m³	0.1 0 small containers (dedicate RCR 0.037 0.35 0.387 0.698 0 small containers (dedicate RCR 0.007 0.1 0.107	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate 1.372 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.1 0 small containers (dedicate RCR 0.037 0.35 0.387 0.698 0 small containers (dedicate RCR 0.007 0.1 0.107 0.2	Method ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.17. Worker exposure Roller a	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate 1.372 mg/kg bw/day 121 mg/m³ 484 mg/m³ application or brushing (PROC	0.1 Dismall containers (dedicate RCR 0.037 0.35 0.387 0.698 Dismall containers (dedicate RCR 0.007 0.1 0.107 0.2	Method ECETOC TRA worker ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.15. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.16. Worker exposure Transfe Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 6.86 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ er of substance or mixture into Exposure estimate 1.372 mg/kg bw/day 121 mg/m³ 484 mg/m³	0.1 0 small containers (dedicate RCR 0.037 0.35 0.387 0.698 0 small containers (dedicate RCR 0.007 0.1 0.107 0.2	Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.447	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
19.3.18. Worker exposure Roller a	application or brushing (PROC10)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.347	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
19.3.19. Worker exposure Roller a			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	27.43 mg/kg bw/day	0.147	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	484 mg/m³	0.247	ECETOC TRA worker
19.3.20. Worker exposure Sprayin		0.2	ECETOC TICA WOIKEI
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	107.1 mg/kg bw/day	0.576	ECETOC TRA worker
Inhalation - Long-term - systemic effects	5.5 mg/m³	0.005	Used ART model (v1.5)
Sum RCR - Long-term - systemic effects		0.581	
Acute - Local - Inhalation	1940 mg/m³	0.802	ECETOC TRA worker
19.3.21. Worker exposure Sprayin	ng (PROC11)		
	-	RCR	Method
Route of exposure and type of effects	Exposure estimate		
of effects Dermal - Long-term - systemic effects	21.43 mg/kg bw/day	0.115	ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects		0.826	ECETOC TRA worker Used ART model (v1.5)
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	21.43 mg/kg bw/day 1000 mg/m³	0.826 0.941	Used ART model (v1.5)
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³	0.826 0.941 0.4	
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatmer Route of exposure and type	21.43 mg/kg bw/day 1000 mg/m³	0.826 0.941 0.4	Used ART model (v1.5)
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri	0.826 0.941 0.4 ng (PROC13)	Used ART model (v1.5) ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate	0.826 0.941 0.4 ng (PROC13)	Used ART model (v1.5) ECETOC TRA worker Method
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.23. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri Exposure estimate 2.742 mg/kg bw/day	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13) RCR	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.23. Worker exposure Treatment Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri Exposure estimate	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13) RCR 0.015	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker
of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 19.3.22. Worker exposure Treatmone fefects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Inhalation - Long-term - systemic effects Acute - Local - Inhalation 19.3.23. Worker exposure Treatmone feets Acute - Local - Inhalation 19.3.23. Worker exposure Treatmone feets Dermal - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term -	21.43 mg/kg bw/day 1000 mg/m³ 968 mg/m³ ent of articles by dipping and pouri Exposure estimate 13.71 mg/kg bw/day 423.5 mg/m³ 1690 mg/m³ ent of articles by dipping and pouri Exposure estimate 2.742 mg/kg bw/day	0.826 0.941 0.4 ng (PROC13) RCR 0.074 0.35 0.424 0.698 ng (PROC13) RCR	Used ART model (v1.5) ECETOC TRA worker Method ECETOC TRA worker ECETOC TRA worker ECETOC TRA worker Method ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

3.24. Worker exposure Manual	activities involving hand conta	act (PROC19)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.352	
Acute - Local - Inhalation 3.25. Worker exposure Manual	968 mg/m³	0.4	ECETOC TRA worker
Route of exposure and type	Exposure estimate	RCR	Method
of effects	·		
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	1450	0.452	CCTTOC TDA worker
Acute - Local - Inhalation 3.26. Worker exposure Manual	1450 mg/m³	0.599	ECETOC TRA worker
·		· · ·	Mathad
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	141.4 mg/kg bw/day	0.76	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.86	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.27. Worker exposure Equipm		· · · · · · · · · · · · · · · · · · ·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker
3.28. Worker exposure Equipm	nent cleaning and maintenance	(PROC8a, PROC28)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
3.29. Worker exposure Equipm			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
.4. Guidance to Downstr	eam User to evaluate wh	ether he works inside t	he boundaries set by the ES
4.1. Environment			

19.4.2. Health

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to
	guarantee safe use for workers.

20.1. Title section

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

20. AC SE20: Oil field well drilling and production operations

Oil field well drilling and production operations		ES Ref.: A ES Type:		Association ref code: PV
Environment				
CS 1	Oil field well drilling and producti	Oil field well drilling and production operations		
Worker				
CS 2	Use in closed process; Storage	Use in closed process; Storage		
CS 3	process with occasional controlle	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions		
CS 4	Use in closed batch process (syr With occasional controlled expos		PROC3	
CS 5	Chemical production where opporarises	ortunity for exposure	PROC4	
CS 6	Transfer of substance or mixture discharging) at non-dedicated fa		PROC8a	
CS 7	Transfer of substance or mixture discharging) at dedicated facilities	` 5 5	PROC8b	
CS 8	Equipment cleaning and mainter	nance	PROC8a, PR	OC28
Processes, tasks, activities of	overed Widespread use	by professional workers (PW	/)	
0.2. Conditions of use	affecting exposure			
	tal exposure: Oil field well drilling and	d production operations (ERC8d)	
ERC8d	Widespread use of non-reactive proce			utdoor)
Amount used, frequency a	nd duration of use (or from service lif	e)		
Amounts used	≤ 0.021 t/o	i		
Conditions and measures	related to sewage treatment plant			
Municipal Sewage Treatmen	t Plant			
Conditions and measures	related to treatment of waste (including	ng article waste)		
Dispose of waste in accordar legislation		ig armore in actor,		
.2.2. Control of worker expe	osure: Use in closed process; Storage	e (PROC1)		
PROC1	Chemical production or refinery in clos containment conditions	ed process without likelihoo	d of exposure o	r processes with equivalent
Product (article) characteri	stics			
Physical form of product	Liquid			
Concentration of substance i	n product ≤ 100 %			
Amount used (or contained	I in articles), frequency and duration	of use/exposure		
Amount used (or contained Exposure duration	I in articles), frequency and duration ≤ 8 h/day	of use/exposure		
Exposure duration	≤ 8 h/day	of use/exposure		
Exposure duration Technical and organisation	≤ 8 h/day all conditions and measures ery in closed process without likelihood of	·		
Exposure duration Technical and organisation Chemical production or refine with equivalent containment	≤ 8 h/day all conditions and measures ery in closed process without likelihood of conditions to that the risk management measures in	of exposure or processes		
Exposure duration Technical and organisation Chemical production or refine with equivalent containment Supervision in place to check	≤ 8 h/day nal conditions and measures ery in closed process without likelihood conditions that the risk management measures in tions followed.	of exposure or processes		
Exposure duration Technical and organisation Chemical production or refine with equivalent containment Supervision in place to check correctly and operation condi	≤ 8 h/day nal conditions and measures ery in closed process without likelihood conditions that the risk management measures in tions followed.	of exposure or processes		
Exposure duration Technical and organisation Chemical production or refine with equivalent containment Supervision in place to check correctly and operation cond Other conditions affecting	≤ 8 h/day nal conditions and measures ery in closed process without likelihood of conditions t that the risk management measures in tions followed. workers exposure	of exposure or processes	≤ 56 °C	
Exposure duration Technical and organisation Chemical production or refine with equivalent containment of Supervision in place to check correctly and operation conditions affecting indoor, and/or, outdoor Maximum process temperated. 2.2.3. Control of worker expositions.	≤ 8 h/day nal conditions and measures ery in closed process without likelihood of conditions t that the risk management measures in tions followed. workers exposure	of exposure or processes place are being used		asional controlled exposure c

08/08/2022 (Revision date) IE - en 225/265

Liquid

≤ 100 %

with equivalent containment conditions

Product (article) characteristics

Concentration of substance in product

Physical form of product

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

		··		
· ·	d in articles), frequency an	d duration of use/exposure		
Exposure duration ≤ 8 h/day				
Technical and organisational conditions and measures				
	Chemical production or refinery in closed continuous process with occasional controlled			
exposure or processes with equivalent containment conditions Supervision in place to check that the risk management measures in place are being used				
correctly and operation cond	•	nodouros in place are senig acca		
Other conditions affecting	workers exposure			
indoor,and/or,outdoor				
Maximum process temperature ≤ 56 °C				
20.2.4. Control of worker expe PROC3)	osure: Use in closed batch	process (synthesis or formulation);	With occasional controlled exposure	
PROC3	Manufacture or formulation or processes with equivale		h processes with occasional controlled exposure	
Product (article) character	istics			
Physical form of product		Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or contained	d in articles), frequency an	d duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisation	nal conditions and measur	es		
Use in closed batch process	(synthesis or formulation). V	Vith occasional controlled exposure		
Supervision in place to check correctly and operation cond		measures in place are being used		
Other conditions affecting	workers exposure			
indoor,and/or,outdoor				
Maximum process temperate			≤ 56 °C	
	· · · · · · · · · · · · · · · · · · ·	n where opportunity for exposure ari	ses (PROC4)	
PROC4		e opportunity for exposure arises		
Product (article) character	istics			
Physical form of product	in product	Liquid ≤ 100 %		
Concentration of substance	·			
	d in articles), frequency an	d duration of use/exposure		
Exposure duration		≤ 8 h/day		
Technical and organisation				
correctly and operation cond	litions followed.	measures in place are being used		
Other conditions affecting	workers exposure			
outdoor Maximum process temperate	Iro		≤ 56 °C	
Maximum process temperate		ce or mixture (charging and discharg	ing) at non-dedicated facilities (PROC8a)	
PROC8a		nixture (charging and discharging) at not		
Product (article) character		and all all and all all and all and all all all and all all all and all all all all all all all all all al		
Physical form of product	101103	Liquid		
Concentration of substance	in product	≤ 100 %		
Amount used (or contained in articles), frequency and duration of use/exposure				
Exposure duration	a artiology, frequency an	≤ 8 h/day		
Technical and organisation	nal conditions and measur	es		
Supervision in place to check correctly and operation cond	•	measures in place are being used		
Conditions and measures	related to personal protect	tion, hygiene and health evaluation		
Wear a respirator providing a	a minimum efficiency of (%):		90 % (APF 10)	
Other conditions affecting	workers exposure			
indoor,and/or,outdoor				

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

≤ 56 °C Maximum process temperature 20.2.7. Control of worker exposure: Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b) PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Other conditions affecting workers exposure ≤ 56 °C Maximum process temperature 20.2.8. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28) PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC28 Manual maintenance (cleaning and repair) of machinery Product (article) characteristics Physical form of product Liquid Concentration of substance in product ≤ 100 % Amount used (or contained in articles), frequency and duration of use/exposure Exposure duration ≤ 8 h/day Technical and organisational conditions and measures Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Conditions and measures related to personal protection, hygiene and health evaluation 90 % Wear a respirator providing a minimum efficiency of (%): (APF 10) Other conditions affecting workers exposure indoor,and/or,Outdoor ≤ 40 °C Maximum process temperature 20.3. Exposure estimation and reference to its source 20.3.1. Environmental release and exposure Oil field well drilling and production operations (ERC8d) Release estimation method Release route Release rate Release fraction to wastewater 100 % **ERC** FRC Release to waste water from process 21.32 kg/day Release fraction to air from process 100 % **ERC** Release fraction to soil from process 20 % **ERC PNEC** Assessment method **Protection target** Unit Exposure **RCR** estimation Freshwater 0.881 10.6 0.083 EUSES v2.1.2 ma/l Marine water mg/l 0.083 1.06 0.078 **EUSES v2.1.2** Freshwater sediment 3.863 30.4 0.127 EUSES v2.1.2 mg/kg Marine water sediment 0.365 3.04 0.12 **EUSES v2.1.2** mg/kg Sewage treatment plant mg/l 1.327 100 0.013 EUSES v2.1.2 Soil 0.042 29.5 0.001 EUSES v2.1.2 mg/kg 20.3.2. Worker exposure Use in closed process; Storage (PROC1) **Exposure estimate RCR** Method Route of exposure and type of effects Dermal - Long-term - systemic 0 **ECETOC TRA worker** 0.034 mg/kg bw/day effects O ECETOC TRA worker 0.242 mg/m³ Inhalation - Long-term systemic effects Sum RCR - Long-term -0 systemic effects

n

ECETOC TRA worker

Acute - Local - Inhalation

0.968 mg/m³

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

20.3.3. Worker exposure (hemical production or refinery in closed continuous process with occasional controlled exposure or processes
with equivalent containme	nt conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

20.3.4. Worker exposure Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

20.3.5. Worker exposure Chemical production where opportunity for exposure arises (PROC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker

20.3.6. Worker exposure Transfer of substance or mixture (charging and discharging) at non-dedicated facilities (PROC8a)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

20.3.7. Worker exposure Transfer of substance or mixture (charging and discharging) at dedicated facilities (PROC8b)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker

20.3.8. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

20.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

20.4.1. Environment

Guidance - Environment	No additional risk management measures, besides those that are mentioned above, are needed to
	guarantee safe use for environment.

20.4.2. Health

08/08/2022 (Revision date) IE - en 228/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to
	guarantee safe use for workers.

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

21. AC SE21: Use in Agrochemicals

21.1. Title section		
Use in Agrochemicals	ES Ref.: AC SE21 ES Type: Worker	Association ref code: PW

Environment		
CS 1	Spray application of plant protection products containing co-formulants (indoor or outdoor)	ERC8a, ERC8d
CS 2	Direct application of plant protection products (granules or treated seeds) containing co-formulants to soil (indoor or outdoor)	ERC8a, ERC8d
Worker		
CS 3	Use in closed process; Storage	PROC1
CS 4	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions	PROC2
CS 5	Chemical production where opportunity for exposure arises	PROC4
CS 6	Chemical production where opportunity for exposure arises	PROC4
CS 7	Chemical production where opportunity for exposure arises	PROC4
CS 8	Dispersing seeds / granules: delivery of seeds and application	PROC8a
CS 9	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 10	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 11	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities	PROC8a
CS 12	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 13	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 14	Transfer of substance or mixture (charging and discharging) at dedicated facilities	PROC8b
CS 15	Seed treatment: Mixing / loading and transfer of treated seeds from batch treater into bags	PROC8a, PROC8b
CS 16	Tractor mounted spraying	PROC8a, PROC11
CS 17	Hand-held spraying	PROC8a, PROC11
CS 18	Spraying	PROC11
CS 19	Spraying	PROC11
CS 20	Treatment of articles by dipping and pouring	PROC13
CS 21	Treatment of articles by dipping and pouring	PROC13
CS 22	Treatment of articles by dipping and pouring	PROC13
CS 23	Manual activities involving hand contact	PROC19
CS 24	Manual activities involving hand contact	PROC19
CS 25	Manual activities involving hand contact	PROC19
CS 26	Equipment cleaning and maintenance	PROC8a, PROC28
CS 27	Equipment cleaning and maintenance	PROC8a, PROC28
CS 28	Equipment cleaning and maintenance	PROC8a, PROC28

Processes, tasks, activities covered

Widespread use by professional workers (PW) $\,$

21.2. Conditions of use affecting exposure

Amounts used

21.2.1. Control of environmental exposure: Spray application of plant protection products containing co-formulants (indoor or outdoor) (ERC8a, ERC8d)

Amount used frequency a	nd duration of use (or from service life)
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

08/08/2022 (Revision date) IE - en 230/265

≤ 0.018 t/d

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Application rate		168 kg/ha	
Number of applications		1 1	
Application interval		1 days	
Conditions and measures re	elated to sewage treatmer	nt plant	
Not applicable as there is no	<u> </u>	n piani	
Conditions and measures re	elated to treatment of was	te (including article waste)	
Dispose of waste in accordan		no (moraamig artiolo macio)	
legislation	lal anno anno Dinast annolis		
ormulants to soil (indoor or o		cation of plant protection products (g	ranules or treated seeds) containing co-
ERC8a	Widespread use of non-rea	active processing aid (no inclusion into	or onto article, indoor)
ERC8d	Widespread use of non-rea	active processing aid (no inclusion into o	or onto article, outdoor)
Amount used, frequency an	nd duration of use (or from	n service life)	
Amounts used		≤ 0.018 t/d	
Application rate		34.1 kg/ha	
Number of applications Application interval		1 days	
	alated to comment to a tr	·	
Conditions and measures re Municipal Sewage Treatment		nt piant	
, ,		As finale dia a settle series	
Conditions and measures re		te (including article waste)	
Dispose of waste in accordan legislation	ce with environmental		
21.2.3. Control of worker expo	sure: Use in closed proce	ss; Storage (PROC1)	
PROC1	Chemical production or ref containment conditions	inery in closed process without likelihoo	d of exposure or processes with equivalent
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measure	es	
with equivalent containment of	conditions that the risk management r	t likelihood of exposure or processes neasures in place are being used	
Other conditions affecting v			
indoor,and/or,outdoor			
Maximum process temperatu	re		≤ 56 °C
21.2.4. Control of worker expo processes with equivalent cor			ocess with occasional controlled exposure or
PROC2	Chemical production or ref with equivalent containment		occasional controlled exposure or processes
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency and	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and measure	es	
exposure or processes with e	quivalent containment cond that the risk management r	cess with occasional controlled litions lition	
Other conditions affecting v	workers exposure		
indoor,and/or,outdoor			
Maximum process temperatu	re		≤ 56 °C

08/08/2022 (Revision date) IE - en 231/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

PROC4		oduction where opportunity for exposure a	
PROC4	Chemical production	on where opportunity for exposure arises	
Product (article) char	acteristics		
Physical form of produ	ot .	Liquid	
Concentration of subst	ance in product	≤ 100 %	
Amount used (or con	tained in articles), freque	ency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organi	sational conditions and r	neasures	
Supervision in place to correctly and operation	· ·	ement measures in place are being used	
	cting workers exposure		
outdoor	tillig workers exposure		
Maximum process tem	perature		≤ 56 °C
•		oduction where opportunity for exposure a	
PROC4		on where opportunity for exposure arises	
Droduct (artials) shar	·	, , , , , , , , , , , , , , , , , , ,	
Product (article) char Physical form of production		Liquid	
Concentration of subst		≤ 100 %	
	•		
•	tained in articles), freque	ency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organi	sational conditions and r	neasures	
Provide a good standa Efficiency	rd of general ventilation (no	ot less than 3 to 5 air changes per hour).	30 %
		ement measures in place are being used	
Other conditions affe	cting workers exposure		
indoor			
Maximum process tem	perature		≤ 56 °C
.2.7. Control of worke	r exposure: Chemical pro	oduction where opportunity for exposure a	arises (PROC4)
PROC4	Chemical production	on where opportunity for exposure arises	
Product (article) char	acteristics		
Physical form of produ	ct	Liquid	
Concentration of subst	ance in product	≤ 100 %	
Amount used (or con	tained in articles), freque	ency and duration of use/exposure	
Exposure duration	,,,,,,,,,	≤ 8 h/day	
	aatianal aanditiana and .		
	sational conditions and r		
	on - efficiency of at least	ot less than 1 to 3 air changes per hour)	80 %
	check that the risk manag	ement measures in place are being used	00 /0
Other conditions affe	cting workers exposure		
indoor			
Maximum process tem	perature		≤ 56 °C
2.8. Control of worke	r exposure: Dispersing s	eeds / granules: delivery of seeds and app	olication (PROC8a)
PROC8a	Transfer of substar	nce or mixture (charging and discharging) at r	non-dedicated facilities
Product (article) char	acteristics		
Physical form of produ		Solid	
		ency and duration of use/exposure	
Exposure duration	amed in articles), freque	≤ 8 h/day	
		= 0 1 // day	
Application rate		527.3 kg/ha	

08/08/2022 (Revision date) IE - en 232/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers exposure

Manual dispersion by hand: Areas not exceeding 200 m² per day,Hand-held equipment: area up to 1 ha per day,Tractor-mounted spreaders: 20 ha per day,Loader / Applicator, Belly Grinder: 1 ha per day	
indoor,and/or,Outdoor	
21.2.9. Control of worker exposure: Transfer of substance or mixture (charging and discharge)	arging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or mixture (charging and discharging) at	non-dedicated facilities
Product (article) characteristics	
Physical form of product Liquid	
Concentration of substance in product ≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure	
Exposure duration ≤ 8 h/day	
Technical and organisational conditions and measures	
Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	
Conditions and measures related to personal protection, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):	90 % (APF 10)
Other conditions affecting workers exposure	
indoor,and/or,Outdoor	
Maximum process temperature	≤ 56 °C
21.2.10. Control of worker exposure: Transfer of substance or mixture (charging and disch	narging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or mixture (charging and discharging) at	non-dedicated facilities
Product (article) characteristics	
Physical form of product Liquid	
Concentration of substance in product ≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure	
Exposure duration $\leq 8 \text{ h/day}$	
Technical and organisational conditions and measures	
Provide a good standard of controlled ventilation (5 to 10 air changes per hour). Efficiency Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.	70 %
Other conditions affecting workers exposure	
indoor	
Maximum process temperature	≤ 56 °C
21.2.11. Control of worker exposure: Transfer of substance or mixture (charging and discharge)	narging) at non-dedicated facilities (PROC8a)
PROC8a Transfer of substance or mixture (charging and discharging) at	non-dedicated facilities
Product (article) characteristics	
Physical form of product Liquid	
Concentration of substance in product ≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure	
Exposure duration ≤ 8 h/day	
Technical and organisational conditions and measures	
Provide a good standard of general ventilation (not less than 1 to 3 air changes per hour) Local exhaust ventilation - efficiency of at least Supervision in place to check that the risk management measures in place are being used	80 %
correctly and operation conditions followed. Other conditions affecting workers exposure	
indoor	
Maximum process temperature	≤ 56 °C
21.2.12. Control of worker exposure: Transfer of substance or mixture (charging and disch	narging) at dedicated facilities (PROC8b)
PROC8b Transfer of substance or mixture (charging and discharging) at	
Product (article) characteristics	
Physical form of product Liquid	
08/08/2022 (Revision date) IE - en	233/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency:	and duration of use/exposure	
Exposure duration	in uniology, nequency	≤ 8 h/day	
Technical and organisation	al conditions and meas	ures	
<u> </u>		s than 3 to 5 air changes per hour).	30 %
Efficiency		<u> </u>	
Supervision in place to check correctly and operation condi		nt measures in place are being used	
Other conditions affecting v	workers exposure		
indoor			
Maximum process temperatu	re		≤ 56 °C
2.13. Control of worker exp	osure: Transfer of subs	stance or mixture (charging and disch	parging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance o	r mixture (charging and discharging) at o	dedicated facilities
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and meas	ures	
	that the risk managemer	nt measures in place are being used	
Other conditions affecting v	workers exposure		
outdoor			
Maximum process temperatu	re		≤ 56 °C
2.14. Control of worker exp	osure: Transfer of subs	stance or mixture (charging and disch	parging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance o	r mixture (charging and discharging) at o	dedicated facilities
Product (article) characteris	stics		
Physical form of product		Liquid	
Concentration of substance in	n product	≤ 100 %	
Amount used (or contained	in articles), frequency	and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	al conditions and moss	HITAS	
		s than 1 to 3 air changes per hour)	
Local exhaust ventilation - eff		a man i to o an omangeo per mean,	90 %
			Inhalation
Local exhaust ventilation - eff	iciency of at least		80 % Dermal
Supervision in place to check correctly and operation condition		nt measures in place are being used	Domina
Other conditions affecting v			
indoor	•		
Maximum process temperatu	re		≤ 56 °C
2.15. Control of worker exp	osure: Seed treatment:	Mixing / loading and transfer of treate	ed seeds from batch treater into bags (PROC8
PROC8a	Transfer of substance of	r mixture (charging and discharging) at r	non-dedicated facilities
PROC8b		r mixture (charging and discharging) at o	
Product (article) characteris		, 3 3 3 3 3 3	
Physical form of product	J.1.30	Solid, high dustiness	
Concentration of substance in	n product	· •	is assumed 50% of its initial concentration (defaul
	in articles) frequency:	,	
Amount used (or contained		and dandhon of docrexposure	
Amount used (or contained Exposure duration	,,, ,, ,,	≤ 8 h/day	

08/08/2022 (Revision date) IE - en 234/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CAS-No.: 67-64-1 Product form: Su	ibstance Physical state: Liquid	Substance type: Mono-constituent	
Other conditions affecting	workers exposure		
20 ha (Default area for tracto	r)		
indoor,and/or,Outdoor			
21.2.16. Control of worker exp	osure: Tractor mounted s	praying (PROC8a, PROC11)	
PROC8a	Transfer of substance or m	nixture (charging and discharging) at nor	n-dedicated facilities
PROC11	Non industrial spraying		
Product (article) characteri	stics		
Physical form of product		Liquid	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration	,, , ,	≤ 8 h/day	
Application rate		105.2 kg/ha	
Technical and organisation	nal conditions and measure	es	
Ensure material transfers are			
Local exhaust ventilation - ef	ficiency of at least		80
Other conditions affecting			
		ctor-mounted airblast sprayer (8	
indoor,and/or,Outdoor			
21.2.17. Control of worker exp	osure: Hand-held sprayin	g (PROC8a, PROC11)	
PROC8a	Transfer of substance or m	nixture (charging and discharging) at nor	n-dedicated facilities
PROC11	Non industrial spraying		
Product (article) characteri	stics		
Physical form of product		Liquid	
Other product characteristics		Exposure to vapour (in addition to aerosol) is calculated based on a continuous release	
Amount used (or contained	l in articles) frequency an	of the volatile substance (VP >=0.1Pa)) over 6 h limited by ventilation (1/h)
Exposure duration	in articles), frequency and	≤ 8 h/day	
Application rate		41.4 kg/ha	
• •		Ng na	
Other conditions affecting Hand-held sprayer, hydraulic	·	ha par day	
indoor,and/or,Outdoor	Tiozzies. High-level target, 1	na per day	
Outdoor and greenhouse app	olications are covered		
.			
21.2.18. Control of worker exp)	
PROC11	Non industrial spraying		
Product (article) characteri	stics		
Physical form of product		Liquid	
Concentration of substance i	n product	≤ 100 %	
Amount used (or contained	d in articles), frequency and	·	
Exposure duration		≤ 8 h/day	
Moderate application rate (0.	3 - 3 l/minute)		
Technical and organisation	nal conditions and measure	es	
0	•	nan 1 to 3 air changes per hour)	
Local exhaust ventilation - ef Surface spraying of liquids. S	praying with no or low comp		80 %
Ensure that direction of appli	<u> </u>		
Supervision in place to check correctly and operation condi	· ·	neasures in place are being used	
Other conditions affecting	workers exposure		
Indoors,Assumes large work	rooms		
Maximum process temperatu			≤ 56 °C
21.2.19. Control of worker exp	oosure: Spraying (PROC11)	
PROC11	Non industrial spraying		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteri			
Jaaot (artiole) orial doter	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Moderate application rate (0.	.3 - 3 l/minute)		
Technical and organisation	nal conditions and measur	es	
Surface spraying of liquids. S	Spraying with no or low comp	oressed air use	
Ensure that direction of appli	,		
Supervision in place to check correctly and operation cond		measures in place are being used	
Conditions and measures	related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):			90 %
Wear gloves providing a min	imum efficiency of (%):		(APF 10) 80 %
			(EN 374)
Other conditions affecting	·		
Indoors,Assumes large work	· · · · · · · · · · · · · · · · · · ·	e to buildings (< 4 m)	
Maximum process temperatu			≤ 56 °C
		es by dipping and pouring (PROC13)	
PROC13	Treatment of articles by di	pping and pouring	
Product (article) characteri	istics		
Physical form of product		Liquid	
Concentration of substance i	in product	≤ 100 %	
Amount used (or contained	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisation	nal conditions and measur	es	
Efficiency Supervision in place to check	k that the risk management r	han 3 to 5 air changes per hour). measures in place are being used	30 %
correctly and operation cond			
Other conditions affecting indoor	workers exposure		
IIIQOOI			
	uro		< 56 °C
Maximum process temperatu		es by dinning and nouring (PROC13)	≤ 56 °C
Maximum process temperature 21.2.21. Control of worker experience of the control of worker experience of the control of the co	posure: Treatment of articl	es by dipping and pouring (PROC13)	≤ 56 °C
Maximum process temperature 21.2.21. Control of worker experience PROC13	posure: Treatment of articl Treatment of articles by di		≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteri	posure: Treatment of articl Treatment of articles by di	pping and pouring	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product	posure: Treatment of articl Treatment of articles by di	pping and pouring Liquid	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in	posure: Treatment of articl Treatment of articles by digitations istics in product	pping and pouring Liquid ≤ 100 %	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained	posure: Treatment of articl Treatment of articles by digitations istics in product	pping and pouring Liquid ≤ 100 % d duration of use/exposure	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration	Treatment of article Treatment of articles by distics in product d in articles), frequency an	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation	Treatment of article Treatment of articles by distics in product d in articles), frequency an	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good	Treatment of article by distics in product d in articles), frequency an all conditions and measur general ventilation (not less to	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good Local exhaust ventilation - ef	Treatment of article Treatment of articles by digistics in product d in articles), frequency and articles are described in articles and measure general ventilation (not less to fficiency of at least k that the risk management residues articles are described in articles.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C 80 %
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good Local exhaust ventilation - ef Supervision in place to check	Treatment of article Treatment of articles by digistics in product d in articles), frequency and articles and measure general ventilation (not less to fficiency of at least k that the risk management relitions followed.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour)	
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good Local exhaust ventilation - ef Supervision in place to check correctly and operation conditions.	Treatment of article Treatment of articles by digistics in product d in articles), frequency and articles and measure general ventilation (not less to fficiency of at least k that the risk management relitions followed.	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour)	
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good Local exhaust ventilation - ef Supervision in place to check correctly and operation cond Other conditions affecting	Treatment of article Treatment of articles by digistics in product d in articles), frequency and mal conditions and measure general ventilation (not less to fficiency of at least k that the risk management relitions followed. workers exposure	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour)	
Product (article) characteric Physical form of product Concentration of substance in Exposure duration Technical and organisation Provide a good standard of Concentration in place to check correctly and operation cond Other conditions affecting indoor Maximum process temperate	Treatment of article Treatment of articles by digistics in product d in articles), frequency and articles are described in articles and measure general ventilation (not less to a fficiency of at least k that the risk management relitions followed. workers exposure	pping and pouring Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour)	80 %
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good standa	Treatment of article Treatment of articles by digistics in product d in articles), frequency and articles are described in articles and measure general ventilation (not less to a fficiency of at least k that the risk management relitions followed. workers exposure	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used es by dipping and pouring (PROC13)	80 %
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good standa	Treatment of article Treatment of articles by digistics in product d in articles), frequency and mal conditions and measure general ventilation (not less to fficiency of at least k that the risk management relitions followed. workers exposure posure: Treatment of articles by digistical products are the products are the posure of articles by digistical products.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used es by dipping and pouring (PROC13)	80 %
Maximum process temperate 21.2.21. Control of worker exp PROC13 Product (article) characteric Physical form of product Concentration of substance in Amount used (or contained Exposure duration Technical and organisation Provide a good standard of good standa	Treatment of article Treatment of articles by digistics in product d in articles), frequency and mal conditions and measure general ventilation (not less to fficiency of at least k that the risk management relitions followed. workers exposure posure: Treatment of articles by digistical products are the products are the posure of articles by digistical products.	Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es han 1 to 3 air changes per hour) measures in place are being used es by dipping and pouring (PROC13)	80 %

08/08/2022 (Revision date) IE - en 236/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Exposure duration		≤ 8 h/day	
Technical and organis	sational conditions and	d measures	
	check that the risk mana	agement measures in place are being used	
Other conditions affect	ting workers exposure	9	
outdoor			
Maximum process temp	perature		≤ 56 °C
		ctivities involving hand contact (PROC19)
PROC19	Manual activities	involving hand contact	
Product (article) chara	acteristics		
Physical form of produc		Liquid	
Concentration of substa		≤ 100 %	
	•		
•	amed in articles), frequ	uency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
	sational conditions and		
		(not less than 1 to 3 air changes per hour)	20.04
	 n - efficiency of at least check that the risk mana 	agement measures in place are being used	80 %
correctly and operation		agement measures in place are being used	
		al protection, hygiene and health evaluat	ion
	a minimum efficiency of		80 %
			(EN 374)
Other conditions affect	ting workers exposure	е	
ndoor			
Maximum process temp	perature		≤ 56 °C
2.24. Control of worke	er exposure: Manual ac	ctivities involving hand contact (PROC19)
PROC19	Manual activities	involving hand contact	
Product (article) chara	acteristics		
Physical form of produc	t	Liquid	
Concentration of substa	nce in product	≤ 100 %	
Amount used (or cont	ained in articles), frequ	uency and duration of use/exposure	
Exposure duration	,, ,	≤ 8 h/day	
	eational conditions and	1 magaziras	
	sational conditions and	n (5 to 10 air changes per hour). Efficiency	70 %
	check that the risk mana	agement measures in place are being used	70 70
Conditions and measi	ures related to persona	al protection, hygiene and health evaluat	ion
Wear gloves providing	a minimum efficiency of	(%):	80 %
			(EN 374)
	ting workers exposure	е	
ndoor			15000
Maximum process temp			≤ 56 °C
		ctivities involving hand contact (PROC19	
PROC19		involving hand contact	
Product (article) chara			
Physical form of produc		Liquid	
Concentration of substa	ance in product	≤ 100 %	
Amount used (or cont	ained in articles), freq	uency and duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organis	sational conditions and	d measures	
		agement measures in place are being used	
Supervision in place to	oricon triat tric risk rriarit		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

	related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing a minimum efficiency of (%):			90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperature			≤ 56 °C
2.26. Control of worker ex	posure: Equipment cleanin	ng and maintenance (PROC8a, PROC	C28)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (clea	ning and repair) of machinery	
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	ed in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
•	nal canditions and massur	,	
-	nal conditions and measur	measures in place are being used	
correctly and operation cond	ditions followed.	·	
		tion, hygiene and health evaluation	00.9/
vear a respirator providing	a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor	, , , , , , , , , , , , , , , , , , , ,		
Maximum process temperat	ture		≤ 56 °C
		ng and maintenance (PROC8a, PRO	C28)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at n	on-dedicated facilities
PROC28	Manual maintenance (clea	aning and repair) of machinery	
Product (article) sharests:			
	ristics		
Product (article) character Physical form of product	ristics	Liquid	
Product (article) character Physical form of product Concentration of substance		Liquid ≤ 100 %	
Physical form of product Concentration of substance	in product	≤ 100 %	
Physical form of product Concentration of substance Amount used (or containe	in product	≤ 100 % d duration of use/exposure	
Physical form of product Concentration of substance Amount used (or containe Exposure duration	in product ed in articles), frequency an	≤ 100 % d duration of use/exposure ≤ 8 h/day	
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product ed in articles), frequency an	≤ 100 % d duration of use/exposure ≤ 8 h/day es	70.0/
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec	in product d in articles), frequency an anal conditions and measur controlled ventilation (5 to 10 k that the risk management r	≤ 100 % d duration of use/exposure ≤ 8 h/day	70 %
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of	in product ad in articles), frequency an anal conditions and measur controlled ventilation (5 to 10 k that the risk management r ditions followed.	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	70 %
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond	in product ad in articles), frequency an anal conditions and measur controlled ventilation (5 to 10 k that the risk management r ditions followed.	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	70 %
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation cond Other conditions affecting	in product d in articles), frequency an anal conditions and measur controlled ventilation (5 to 10 k that the risk management r ditions followed. J workers exposure	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	70 % ≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat	in product ed in articles), frequency an enal conditions and measur controlled ventilation (5 to 10 ek that the risk management r ditions followed. g workers exposure	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat	in product ed in articles), frequency an anal conditions and measur controlled ventilation (5 to 10 ek that the risk management r ditions followed. y workers exposure ture consure: Equipment cleaning	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation conc Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex	in product ad in articles), frequency and anal conditions and measur controlled ventilation (5 to 10 bk that the risk management reditions followed. g workers exposure ture ture transfer of substance or measure	≤ 100 % d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28	in product ed in articles), frequency and enal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. y workers exposure ture posure: Equipment cleaning Transfer of substance or management of substance (cleaning)	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation conc Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a	in product ed in articles), frequency and enal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. y workers exposure ture posure: Equipment cleaning Transfer of substance or management of substance (cleaning)	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation conc Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character	in product ad in articles), frequency and anal conditions and measur controlled ventilation (5 to 10 bk that the risk management reditions followed. g workers exposure aure posure: Equipment cleaning Transfer of substance or manual maintenance (cleaning)	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at naning and repair) of machinery	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	in product ed in articles), frequency and enal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. g workers exposure eure coposure: Equipment cleaning Transfer of substance or management of substance or management cleaning Manual maintenance (cleaning) ristics in product	d duration of use/exposure ≤ 8 h/day es Pair changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC9) nixture (charging and discharging) at naning and repair) of machinery Liquid ≤ 100 %	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance	in product ed in articles), frequency and enal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. g workers exposure eure coposure: Equipment cleaning Transfer of substance or management of substance or management cleaning Manual maintenance (cleaning) ristics in product	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n aning and repair) of machinery	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperate 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration	in product ed in articles), frequency and enal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. g workers exposure eure coposure: Equipment cleaning Transfer of substance or management of substance or management cleaning Manual maintenance (cleaning) ristics in product	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n aning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product ed in articles), frequency and anal conditions and measur controlled ventilation (5 to 10 ek that the risk management reditions followed. y workers exposure ture posure: Equipment cleaning Transfer of substance or management of substance or management cleaning in product ed in articles), frequency and mal conditions and measur	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n aning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio	in product In articles), frequency and in articles), frequency and conditions and measur controlled ventilation (5 to 10 ke that the risk management reditions followed. In workers exposure Transfer of substance or manual maintenance (clean in product and in articles), frequency and in articles), frequency and general ventilation (not less to the in articles).	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n aning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation conc Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Local exhaust ventilation - e	in product and in articles), frequency and and conditions and measur controlled ventilation (5 to 10 k that the risk management relations followed. I workers exposure and Transfer of substance or manual maintenance (cleaning the product and in articles), frequency and in articles), frequency and in articles), frequency and in articles and measur general ventilation (not less to afficiency of at least to that the risk management in the second in articles in the second in	d duration of use/exposure ≤ 8 h/day es air changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at n aning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es	≤ 56 °C C28) on-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to checorrectly and operation cond Other conditions affecting indoor Maximum process temperate 2.28. Control of worker ex PROC8a PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Local exhaust ventilation - e Supervision in place to chec	in product In articles), frequency and in articles), frequency and in articles and measure controlled ventilation (5 to 10 sk that the risk management reditions followed. In workers exposure It w	d duration of use/exposure ≤ 8 h/day es Dair changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at naning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es than 1 to 3 air changes per hour)	≤ 56 °C C28) on-dedicated facilities
Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Supervision in place to chec correctly and operation conc Other conditions affecting indoor Maximum process temperat 2.28. Control of worker ex PROC8a PROC28 Product (article) character Physical form of product Concentration of substance Amount used (or containe Exposure duration Technical and organisatio Provide a good standard of Local exhaust ventilation - e Supervision in place to chec correctly and operation cond	in product In articles), frequency and in articles), frequency and in articles and measure controlled ventilation (5 to 10 sk that the risk management reditions followed. In workers exposure It w	d duration of use/exposure ≤ 8 h/day es Dair changes per hour). Efficiency measures in place are being used ag and maintenance (PROC8a, PROC nixture (charging and discharging) at naning and repair) of machinery Liquid ≤ 100 % d duration of use/exposure ≤ 8 h/day es than 1 to 3 air changes per hour)	≤ 56 °C C28) on-dedicated facilities

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

21.3. Exposure estimation and reference to its source

21.3.1. Environmental release and exposure Spray application of plant protection products containing co-formulants (indoor or outdoor) (ERC8a, ERC8d)

Release rate	Release estimation method
	Spray treatment
0 %	ECPA SPERC 8d.2.v2
0 kg/day	ECPA SPERC 8d.2.v2
100 %	ECPA SPERC 8d.2.v2
0 %	ECPA SPERC 8d.2.v2
	0 % 0 kg/day 100 %

		1 1 1 1			
Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	9.554	10.6	0.901	ECPA LET v3 (2015)
Marine water	mg/l	0.95	1.06	0.896	ECPA LET v3 (2015)
Freshwater sediment	mg/kg	3.32	30.4	0.109	ECPA LET v3 (2015)
Marine water sediment	mg/kg	0.317	3.04	0.104	ECPA LET v3 (2015)
Soil	mg/kg	0.023	29.5	0.001	ECPA LET v3 (2015)

21.3.2. Environmental release and exposure Direct application of plant protection products (granules or treated seeds) containing coformulants to soil (indoor or outdoor) (ERC8a, ERC8d)

Release route	Release rate	Release estimation method
Application type		Granule application / Seed treatment
Release fraction to wastewater	0 %	ECPA SPERC 8d.1.v2
Release to waste water from process	0 kg/day	ECPA SPERC 8d.1.v2
Release fraction to air from process	0 %	ECPA SPERC 8d.1.v2
Release fraction to soil from process	100 %	ECPA SPERC 8d.1.v2

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	5.47	10.6	0.516	ECPA LET v3 (2015)
Marine water	mg/l	0.542	1.06	0.511	ECPA LET v3 (2015)
Freshwater sediment	mg/kg	3.21	30.4	0.106	ECPA LET v3 (2015)
Marine water sediment	mg/kg	0.301	3.04	0.099	ECPA LET v3 (2015)
Soil	mg/kg	26.6	29.5	0.902	ECPA LET v3 (2015)

21.3.3. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m³	0	ECETOC TRA worker

21.3.4. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

21.3.5. Worker exposure Chemical production where opportunity for exposure arises (PROC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	

08/08/2022 (Revision date) IE - en 239/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
	I production where opportunity for	` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.387	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
<u> </u>	I production where opportunity for	·	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	6.86 mg/kg bw/day	0.037	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.137	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	ng seeds / granules: delivery of see		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	166.3 mg/kg bw/day	0.894	ECPA OWB v3.2 (2015)
Inhalation - Long-term - systemic effects	7.22 mg/m³	0.006	ECPA OWB v3.2 (2015)
Sum RCR - Long-term - systemic effects		0.9	
21.3.9. Worker exposure Transfer	of substance or mixture (charging	and discharging) at non-dedicated f	acilities (PROC8a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	r of substance or mixture (charging		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	4.4F0 m g/m3	0.374	ECETOC TRA
Acute - Local - Inhalation	1450 mg/m ³ or of substance or mixture (charging	0.599	facilities (PROC8a)
Route of exposure and type	Exposure estimate	RCR	Method
of effects	2.742 mg/kg bw/day		ECETOC TRA worker
Dermal - Long-term - systemic effects Inhalation - Long-term -	0 0 ,	0.015	ECETOC TRA worker
systemic effects	242 mg/m³		EGETOG TRA WOIKEI
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	968 mg/m³	0.215	ECETOC TRA worker
	⊨ 968 mg/m³ er of substance or mixture (charging	-	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Cyclotino choole	l .		

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698 g and discharging) at dedicated faci	ECETOC TRA worker
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
·	er of substance or mixture (charging	g and discharging) at dedicated faci	· · · · · · · · · · · · · · · · · · ·
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	60.5 mg/m³	0.05	ECETOC TRA worker
Sum RCR - Long-term - systemic effects	240/3	0.065	FOFTOO TDAd.
Acute - Local - Inhalation	242 mg/m ³	0.1	tor into bags (PROC%), PROC%
		sfer of treated seeds from batch trea	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	7.203 mg/kg bw/day	0.039	ECPA OWB v3.2 (2015)
Inhalation - Long-term - systemic effects	25 mg/m³	0.021	ECPA OWB v3.2 (2015)
Sum RCR - Long-term - systemic effects	mounted envering (PDOC0s, PDO	0.06	
	mounted spraying (PROC8a, PRO		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	167.2 mg/kg bw/day	0.899	ECPA OWB v3.2 (2015)
Inhalation - Long-term - systemic effects	2.03 mg/m³	0.002	ECPA OWB v3.2 (2015)
Sum RCR - Long-term - systemic effects		0.901	
	eld spraying (PROC8a, PROC11)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	145.1 mg/kg bw/day	0.78	ECPA OWB v3.2
Inhalation - Long-term - systemic effects	145.2 mg/m³	0.12	ECPA OWB v3.2
Sum RCR - Long-term - systemic effects		0.9	
•			
3.18. Worker exposure Sprayir	ng (PROC11)		
3.18. Worker exposure Sprayir Route of exposure and type	ng (PROC11) Exposure estimate	RCR	Method
3.18. Worker exposure Sprayir Route of exposure and type of effects Dermal - Long-term - systemic effects	Exposure estimate 107.1 mg/kg bw/day	RCR 0.576	ECETOC TRA worker
3.18. Worker exposure Sprayin Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	Exposure estimate	0.576 0.005	
3.18. Worker exposure Sprayin Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³	0.576 0.005 0.581	ECETOC TRA worker Used ART model (v1.5)
3.18. Worker exposure Sprayin Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³	0.576 0.005	ECETOC TRA worker
3.18. Worker exposure Sprayin Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.19. Worker exposure Sprayin Route of exposure and type	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³	0.576 0.005 0.581	ECETOC TRA worker Used ART model (v1.5)
3.18. Worker exposure Sprayin Route of exposure and type of effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects Acute - Local - Inhalation 3.19. Worker exposure Sprayin	Exposure estimate 107.1 mg/kg bw/day 5.5 mg/m³ 1940 mg/m³ ng (PROC11)	0.576 0.005 0.581 0.802	ECETOC TRA worker Used ART model (v1.5) ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term -		0.941	
systemic effects Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
21.3.20. Worker exposure Treatme	ent of articles by dipping and pouri	ng (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m ³	0.698	ECETOC TRA worker
21.3.21. Worker exposure Treatme	ent of articles by dipping and pouri	ng (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.115	
Acute - Local - Inhalation	484 mg/m ³	0.2	ECETOC TRA worker
21.3.22. Worker exposure Treatme	ent of articles by dipping and pouri	ng (PROC13)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	423.5 mg/m³	0.35	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.424	
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker
21.3.23. Worker exposure Manual	activities involving hand contact (F	PROC19)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.352	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker
<u> </u>	activities involving hand contact (F		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	28.29 mg/kg bw/day	0.152	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects Acute - Local - Inhalation	1450 mg/m³	0.452	ECETOC TRA worker
	activities involving hand contact (F		LOCITOD TITA WOINEI
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic	141.4 mg/kg bw/day	0.76	ECETOC TRA worker
effects Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.86	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
	nent cleaning and maintenance (PRO		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker
21.3.27. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)			

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	363 mg/m³	0.3	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.374	
Acute - Local - Inhalation	1450 mg/m³	0.599	ECETOC TRA worker

21.3.28. Worker exposure Equipment cleaning and maintenance (PROC8a, PROC28)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	2.742 mg/kg bw/day	0.015	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.215	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

21.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

21.4.1. Environment

Guidance - Environment	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for environment.
Environment Scaling Method	ECPA LET
Environment Scalable parameters	Application rate, Number of applications, Application interval, Crop (drift rate), Location and period of application

21.4.2. Health

Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for workers.
Health Scaling Method	ECPA OWB,(Contributing scenarios CS 8, CS 15, CS 16, CS 17)
Health Scalable parameters	Application rate, Personal protection, Respiratory protection, Local exhaust ventilation

08/08/2022 (Revision date) IE - en 243/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

22. AC SE22: Use in de-icing and anti-icing fluids

Use in de-icing and anti-icing fluids			: AC SE22	Association ref code: P
J			e: Worker	
Environment				
CS 1	Use in de-icing and anti-ic	ing fluids	ERC8d	
Worker				
CS 2	Use in closed process; Sto	orage	PROC1	
CS 3		finery in closed continuous ontrolled exposure or processes ent conditions	PROC2	
CS 4	Transfer of substance or r discharging) at dedicated	` 5 5	PROC8b	
CS 5	Spraying		PROC11	
CS 6	Manual activities involving	hand contact	PROC19	
CS 7	Equipment cleaning and n	naintenance	PROC8a, PRO	DC28
Processes, tasks, activities c	overed Widesprea	d use by professional workers (F	PW)	
	·		,	
.2. Conditions of use				
	tal exposure: Use in de-icing a			
ERC8d	Widespread use of non-reactive	processing aid (no inclusion into	o or onto article, ou	utdoor)
Amount used, frequency ar	nd duration of use (or from serv	vice life)		
mounts used ≤ 0.021 t/d				
Conditions and measures r	elated to sewage treatment pla	nt		
Municipal Sewage Treatment	t Plant			
Conditions and measures r	elated to treatment of waste (in	cluding article waste)		
Dispose of waste in accordar legislation	nce with environmental	, , , , , , , , , , , , , , , , , , ,		
2.2. Control of worker expo	sure: Use in closed process; S	storage (PROC1)		
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions			
Product (article) characteri	stics			
Physical form of product	Liqu	Liquid		
Concentration of substance in	n product ≤ 10	≤ 100 %		
Amount used (or contained	l in articles), frequency and dur	ation of use/exposure		
Exposure duration		h/day		
Technical and organisation	al conditions and measures			
	ery in closed process without likeli	ihood of exposure or processes		
Supervision in place to check correctly and operation condi	that the risk management measutions followed.	ures in place are being used		
Other conditions affecting	workers exposure			

22.2.3. Control of worker exposure: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

≤ 56 °C

PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions		
Product (article) characteri	Product (article) characteristics		
Physical form of product		Liquid	
Concentration of substance in product		≤ 100 %	
Amount used (or contained in articles), frequency and duration of use/exposure			
Exposure duration	on ≤ 8 h/day		

08/08/2022 (Revision date) IE - en 244/265

indoor,and/or,outdoor

Maximum process temperature

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

DAG-NO.: 07-04-1 Floudet form: Substance Fif	ysical state: Liquid Substance type: Mono-constituent	
Technical and organisational condition	ons and measures	
,	d continuous process with occasional controlled	
exposure or processes with equivalent consumption of Supervision in place to check that the ris	k management measures in place are being used	
correctly and operation conditions follows		
Other conditions affecting workers ex	posure	
indoor,and/or,outdoor		
Maximum process temperature		≤ 56 °C
2.2.4. Control of worker exposure: Tran	sfer of substance or mixture (charging and discha	rging) at dedicated facilities (PROC8b)
PROC8b Transfer of	of substance or mixture (charging and discharging) at c	ledicated facilities
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles	s), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
·	,	
Technical and organisational conditio		
correctly and operation conditions follows		
Other conditions affecting workers ex	posure	
outdoor		4.50 °C
Maximum process temperature	(PD0044)	≤ 56 °C
22.2.5. Control of worker exposure: Spra		
PROC11 Non indus	strial spraying	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
Amount used (or contained in articles	s), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
Moderate application rate (0.3 - 3 l/minut	te)	
Technical and organisational conditio	ons and measures	
Surface spraying of liquids. Spraying with		
Ensure that direction of application is onl	·	
	sk management measures in place are being used	
correctly and operation conditions follows		
Conditions and measures related to p	ersonal protection, hygiene and health evaluation	
Wear a respirator providing a minimum e	efficiency of (%):	90 %
Wear gloves providing a minimum efficie	ancy of (%):	(APF 10) 80 %
vvear groves providing a minimum emole	integral (70).	(EN 374)
Other conditions affecting workers ex	posure	
Indoors,Assumes large workrooms,and/o	•	
Maximum process temperature	<u> </u>	≤ 60 °C
22.2.6. Control of worker exposure: Man	ual activities involving hand contact (PROC19)	
PROC19 Manual ac	ctivities involving hand contact	
Product (article) characteristics		
Physical form of product	Liquid	
Concentration of substance in product	≤ 100 %	
· ·		
	s), frequency and duration of use/exposure	
Exposure duration	≤ 8 h/day	
l ·	sk management measures in place are being used	
correctly and operation conditions follows		
	ersonal protection, hygiene and health evaluation	00.04
Wear a respirator providing a minimum e	eniciency of (%):	90 % (APF 10)
		, , /
8/08/2022 (Revision date)	IF - en	245/265

08/08/2022 (Revision date) IE - en 245/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting workers exposure		
indoor,and/or,Outdoor		
Maximum process temperature	≤ 56 °C	

22.2.7. Control of worker exposure: Equipment cleaning and maintenance (PROC8a, PROC28)

PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC28	Manual maintenance (cleaning and repair) of machinery

Product (article) characteristics

Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed.

Conditions and measures related to personal protection, hygiene and health evaluation

Wear a respirator providing a minimum efficiency of (%):

90 %
(APF 10)

Other conditions affecting workers exposure

indoor,and/or,Outdoor

Maximum process temperature ≤ 56 °C

22.3. Exposure estimation and reference to its source

22.3.1. Environmental release and exposure Use in de-icing and anti-icing fluids (ERC8d)

Release route	Release rate	Release estimation method
Release fraction to wastewater	100 %	ERC
Release to waste water from process	21.32 kg/day	ERC
Release fraction to air from process	100 %	ERC
Release fraction to soil from process	20 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	0.881	10.6	0.083	EUSES v2.1.2
Marine water	mg/l	0.083	1.06	0.078	EUSES v2.1.2
Freshwater sediment	mg/kg	3.863	30.4	0.127	EUSES v2.1.2
Marine water sediment	mg/kg	0.365	3.04	0.12	EUSES v2.1.2
Sewage treatment plant	mg/l	1.327	100	0.013	EUSES v2.1.2
Soil	mg/kg	0.042	29.5	0.001	EUSES v2.1.2

22.3.2. Worker exposure Use in closed process; Storage (PROC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.034 mg/kg bw/day	0	ECETOC TRA worker
Inhalation - Long-term - systemic effects	0.242 mg/m ³	0	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0	
Acute - Local - Inhalation	0.968 mg/m³	0	ECETOC TRA worker

22.3.3. Worker exposure Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions (PROC2)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	1.37 mg/kg bw/day	0.007	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.107	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 246/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Route of exposure and type	Exposure estimate	RCR	Method		
of effects					
Dermal - Long-term - systemic offects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker		
nhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker		
Sum RCR - Long-term - systemic effects		0.424			
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker		
3.5. Worker exposure Spraying	g (PROC11)				
Route of exposure and type of effects	Exposure estimate	RCR	Method		
Dermal - Long-term - systemic effects	21.43 mg/kg bw/day	0.115	ECETOC TRA worker		
nhalation - Long-term - systemic effects	1000 mg/m³	0.826	Used ART model (v1.5)		
Sum RCR - Long-term - systemic effects		0.941			
Acute - Local - Inhalation	968 mg/m ³	0.4	ECETOC TRA worker		
3.6. Worker exposure Manual a	activities involving hand con	tact (PROC19)			
Route of exposure and type of effects	Exposure estimate	RCR	Method		
Dermal - Long-term - systemic effects	141.4 mg/kg bw/day	0.76	ECETOC TRA worker		
nhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker		
Sum RCR - Long-term - systemic effects		0.86			
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker		
3.7. Worker exposure Equipme	ent cleaning and maintenance	e (PROC8a, PROC28)			
Route of exposure and type of effects	Exposure estimate	RCR	Method		
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker		
nhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker		
Sum RCR - Long-term - systemic effects		0.174			
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker		
4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES		
4.1. Environment					
Guidance - Environment	No additional risk mana guarantee safe use for		ose that are mentioned above, are needed to		
4.2. Health					
Guidance - Health	No additional risk mana	agement measures, besides the	se that are mentioned above, are needed to		
	aaaona non man		rs.		

08/08/2022 (Revision date) IE - en 247/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

23. AC SE23: Explosives manufacture and use

3.1. Title section				
Explosives manufacture	e and use	ES Ref.: <i>F</i> ES Type		Association ref code: PW
Environment				
CS 1	Explosives manufacture and us	е	ERC8d	
Worker				
CS 2	Use in closed process; Storage		PROC1	
CS 3	Use in closed batch process (sy With occasional controlled expo	,,,	PROC3	
CS 4	Mixing or blending in batch prod	cesses	PROC5	
CS 5	Transfer of substance or mixtur discharging) at non-dedicated fa		PROC8a	
CS 6	Transfer of substance or mixtur discharging) at dedicated facilities		PROC8b	
CS 7	Equipment cleaning and mainte	enance	PROC8a, F	PROC28
Processes, tasks, activities covered	d Widespread use	by professional workers (PV	V)	
3.2. Conditions of use affec	ting exposure			
3.2.1. Control of environmental exp	posure: Explosives manufactu	re and use (ERC8d)		
ERC8d Wide	espread use of non-reactive proce	essing aid (no inclusion into	or onto article,	outdoor)
Amount used, frequency and dur	ration of use (or from service li	fe)		
Amounts used	≤ 0.021 t/			
Conditions and measures related	to sewage treatment plant			
Municipal Sewage Treatment Plant				
Conditions and measures related	to treatment of waste (includi	ng article waste)		
Dispose of waste in accordance wit legislation	th environmental			
3.2.2. Control of worker exposure:	Use in closed process; Storag	e (PROC1)		
	mical production or refinery in clo ainment conditions	sed process without likelihoo	od of exposure	or processes with equivalent
Product (article) characteristics				
Physical form of product	Liquid			
Concentration of substance in prod	uct ≤ 100 %			
Amount used (or contained in art	ticles), frequency and duration	of use/exposure		
Exposure duration	≤ 8 h/day			
Technical and organisational cor	nditions and measures			
Chemical production or refinery in c with equivalent containment conditi Supervision in place to check that t	ons	·		
correctly and operation conditions f	ollowed.	·		
Other conditions affecting worke	ers exposure			

23.2.3. Control of worker exposure: Use in closed batch process (synthesis or formulation); With occasional controlled exposure (PROC3)

PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure
	or processes with equivalent containment condition

≤ 56 °C

Product (article) characteristics	
Physical form of product	Liquid
Concentration of substance in product	≤ 100 %

Amount used (or contained in articles), frequency and duration of use/exposure

Exposure duration ≤ 8 h/day

Technical and organisational conditions and measures

indoor,and/or,outdoor

Maximum process temperature

Use in closed batch process (synthesis or formulation). With occasional controlled exposure

08/08/2022 (Revision date) IE - en 248/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Supervision in place to chec correctly and operation cond		measures in place are being used	
Other conditions affecting			
indoor,and/or,outdoor	,		
Maximum process temperat	ure		≤ 56 °C
		in batch processes (PROC5)	
PROC5	Mixing or blending in batch		
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency an	d duration of use/exposure	
Exposure duration	u u,,quo, u	≤ 8 h/day	
· ·	nal conditions and measur	,	
<u> </u>	k that the risk management r	measures in place are being used	
Conditions and measures	related to personal protect	ion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,outdoor			
Maximum process temperat	ure		≤ 56 °C
.2.5. Control of worker exp	osure: Transfer of substan	ce or mixture (charging and dischar	ging) at non-dedicated facilities (PROC8a)
PROC8a	Transfer of substance or m	nixture (charging and discharging) at no	on-dedicated facilities
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency an	d duration of use/exposure	
Exposure duration	, , ,	≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es ·	
	k that the risk management r	measures in place are being used	
Conditions and measures	related to personal protect	tion, hygiene and health evaluation	
Wear a respirator providing	a minimum efficiency of (%):		90 % (APF 10)
Other conditions affecting	workers exposure		
indoor,and/or,Outdoor			
Maximum process temperat	ure		≤ 56 °C
.2.6. Control of worker exp			ging) at dedicated facilities (PROC8b)
PROC8b	Transfer of substance or m	nixture (charging and discharging) at de	edicated facilities
Product (article) character	ristics		
Physical form of product		Liquid	
Concentration of substance	in product	≤ 100 %	
Amount used (or containe	d in articles), frequency an	d duration of use/exposure	
Exposure duration		≤ 8 h/day	
Technical and organisatio	nal conditions and measur	es	
	k that the risk management r	measures in place are being used	
Other conditions affecting	workers exposure		
outdoor			
Maximum process temperat	ure		≤ 56 °C
2.7 Control of worker exp	osure: Equipment cleaning	and maintenance (PROC8a, PROC2	18)
.z.r. Control of Worker exp			
PROC8a	Transfer of substance or m	nixture (charging and discharging) at no	on-dedicated facilities

08/08/2022 (Revision date) IE - en 249/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics									
Physical form of product	Physical form of product			Liquid					
Concentration of substance	e in pro	oduct		≤ 100 %	≤ 100 %				
Amount used (or contain	mount used (or contained in articles), frequency and				use/exposure)			
Exposure duration				≤ 8 h/day					
Technical and organisati	Technical and organisational conditions and measures								
Supervision in place to che correctly and operation cor			gement n	neasures in pla	ace are being	used			
Conditions and measure	s relat	ed to persona	I protecti	ion, hygiene a	ınd health ev	aluation			
Wear a respirator providing	g a mir	imum efficiend	y of (%):				90 % (APF 10)		
Other conditions affecting	g wor	kers exposure	•						
indoor,and/or,Outdoor									
Maximum process tempera	ature						≤ 56 °C		
23.3. Exposure estima	tion	and referer	ce to it	s source					
23.3.1. Environmental relea	se and	exposure Ex	plosives	manufacture	and use (ER	C8d)			
Release route				Release rate			Release estimation method		
Release fraction to wastev	vater			100 % ERC			ERC	:RC	
Release to waste water from	m pro	cess		21.32 kg/day ERC			ERC		
Release fraction to air from	n proce	ess		100 % ERC			ERC		
Release fraction to soil fro	m proc	ess		20 %	20 % ERC				
Protection target	Unit		Exposu estimat		PNEC	RCF	t	Assessment method	
Freshwater	mg/l		0.881		10.6	0.08	3	EUSES v2.1.2	
Marine water	mg/l		0.083		1.06	0.07	8	EUSES v2.1.2	
Freshwater sediment	mg/k		3.863		30.4	0.12	7	EUSES v2.1.2	
Marine water sediment	mg/k	g	0.365		3.04	0.12		EUSES v2.1.2	
Sewage treatment plant	mg/l		1.327		100	0.01		EUSES v2.1.2	
Soil	mg/k		0.042		29.5	0.00	1	EUSES v2.1.2	
23.3.2. Worker exposure Us				PROC1)					
Route of exposure and to of effects	ype	Exposure es	timate		RCR			Method	
Dermal - Long-term - syste effects	emic	0.034 mg/kg	bw/day		0			ECETOC TRA worker	
Inhalation - Long-term - systemic effects		0.242 mg/m ³			0			ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.000			0				
Acute - Local - Inhalation		0.968 mg/m ³			0	Mide acces	anal aantus	ECETOC TRA worker	

				<u> </u>	
2	23.3.3 Wo	rker exposure Use in c	closed batch proces	s (synthesis or formulation). With occ	asional controlled exposure (PROC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	0.69 mg/kg bw/day	0.004	ECETOC TRA worker
Inhalation - Long-term - systemic effects	242 mg/m³	0.2	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.204	
Acute - Local - Inhalation	968 mg/m³	0.4	ECETOC TRA worker

23.3.4. Worker exposure Mixing or blending in batch processes (PROC5)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker
Sum RCR - Long-term - systemic effects		0.174	
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker

08/08/2022 (Revision date) IE - en 250/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.174		
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker	
3.6. Worker exposure Transfer	of substance or mixture (ch	arging and discharging) at d	edicated facilities (PROC8b)	
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	423.5 mg/m ³	0.35	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.424		
Acute - Local - Inhalation	1690 mg/m³	0.698	ECETOC TRA worker	
3.7. Worker exposure Equipme	ent cleaning and maintenanc	e (PROC8a, PROC28)		
Route of exposure and type of effects	Exposure estimate	RCR	Method	
Dermal - Long-term - systemic effects	13.71 mg/kg bw/day	0.074	ECETOC TRA worker	
Inhalation - Long-term - systemic effects	121 mg/m³	0.1	ECETOC TRA worker	
Sum RCR - Long-term - systemic effects		0.174		
Acute - Local - Inhalation	484 mg/m³	0.2	ECETOC TRA worker	
.4. Guidance to Downstr	eam User to evaluate w	hether he works inside	the boundaries set by the ES	
4.1. Environment				
Guidance - Environment		onal risk management measures, besides those that are mentioned above, are needed to e safe use for environment.		
4.2. Health				
Guidance - Health	No additional risk mana	agement measures, besides the	ose that are mentioned above, are needed to	

08/08/2022 (Revision date) IE - en 251/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

24. AC SE24: Consumer use

24.1. Title section		
Consumer use	ES Ref.: AC SE24	Association ref code: C
	ES Type: Consumer	

Environment		
	Contributing scenario controlling environmental exposure	ERC8d
Consumer		
	Glues, hobby use	PC1
	Glue from spray	PC1
	Sealants, including foam applications	PC1
	Glues DIY-use (carpet glue, tile glue, wood parquet glue)	PC1
	Air care, instant action (aerosol sprays) (premium grade only)	PC3
	Air care, continuous action (solid and liquid) (premium grade only)	PC3
	Washing car window	PC4
	Pouring into radiator	PC4
	Lock de-icer	PC4
	Waterborne latex wall paint	PC9a
	Solvent rich, high solid, water borne paint	PC9a
	Coatings and paints, thinners, paint removers - Aerosol spray can	PC9a
	Removers (paint-, glue-, wall paper-, sealant-remover)	PC9a
	Fillers and putty	PC9b
	Plasters and floor equalizers	PC9b
	Modelling clay	PC9b
	Finger paints	PC9c
	Solvent rich, high solid, water borne paint	PC15
	Non-metal-surface treatment products - Aerosol spray can	PC15
	Removers (paint-, glue-, wall paper-, sealant-remover)	PC15
	liquids	PC24
	Pastes	PC24
	Lubricants, Greases and Release Products - Sprays	PC24
	Polishes, wax / cream (floor, furniture, shoes)	PC31
	Polishes, spray (furniture, shoes)	PC31
	Laundry and dish washing products	PC35
	Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners)	PC35
	Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners)	PC35
	Welding and soldering products, flux products	PC38
	Cosmetics, personal care products (premium grade only)	PC39

Processes, tasks, activities covered Consumer use (C)

24.2. Conditions of use affecting exposure

24.2.1. Control of environmental exposure: Contributing scenario controlling environmental exposure (ERC8d)

ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)			
Amount used, frequency and duration of use (or from service life)				
Daily amount for wide disperse uses		≤ 0.011 t/d		
Conditions and measures related to sewage treatment plant				
Municipal Sewage Treatment Plant				
Conditions and measures related to treatment of waste (including article waste)				
Dispose of waste in accorda legislation	nce with environmental			

08/08/2022 (Revision date) IE - en 252/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

4	4.2.2. Control of Consumer e	xposure. Glues, hoppy us	e (FCI)
	PC1	Adhesives, sealants	
	Product (article) characteri	stics	
	Concentration of substance is	n product	Limit the substance in product to 30 %

Amount use	d (or contained in articles), frequency an	d duration of use/exposure

Amounts used per event	9 g
Covers exposure up to	364 days/yr
Covers exposure up to	4 h/event
Covers exposure up to.1 time a day	

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other	conditi	ons	affecting	consumer	exposure	
_						

Covers skin contact area up to 35.73 cm²

Covers use in room size of 20 m³

24.2.3. Control of consumer exposure: Glue from spray (PC1)

PC1	Adhesives, sealants	
Product (article) charact	eristics	
Concentration of substance	e in product	Limit the substance in product to 30 %
Amount used (or contain	ned in articles), frequency an	d duration of use/exposure
Amounts used per event		85.05 g
Covers exposure up to		11 days/yr
Covers exposure up to		4 h/event
Covers exposure up to,1 t	ime a day	

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other conditions affecting consumer exposure

Covers skin contact area up to	35.73 cm ²
Covers use in room size of	20 m³

24.2.4. Control of consumer exposure: Sealants, including foam applications (PC1)

PC1	Adhesives, sealants	
Product (article) characteri	stics	
Concentration of substance in	n product	Limit the substance in product to 30 %
Amount used (or contained	l in articles), frequency an	d duration of use/exposure
Amounts used per event		75 g
Covers exposure up to		364 days/yr
Covers exposure up to		1 h/event
Covers exposure up to,1 time	e a day	

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other conditions affecting consumer exposure	
Covers skin contact area up to	35.73 cm ²
Covers use in room size of	20 m³

24.2.5. Control of consumer exposure: Glues DIY-use (carpet glue, tile glue, wood parquet glue) (PC1)

PC1	Adhesives, sealants	
Product (article) characteri	stics	
Concentration of substance i	n product	Limit the substance in product to 30 %
Amount used (or contained	l in articles), frequency an	d duration of use/exposure
Amount used (or contained Amounts used per event	l in articles), frequency an	d duration of use/exposure 6390 g

08/08/2022 (Revision date) IE - en 253/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid	Substance type: Mono-constituent
Covers exposure up to	6 h/event
Covers exposure up to,1 time a day	
covore expectate up to,1 time a day	
Conditions and measures related to information and b	pehavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	110 cm ²
Covers use in room size of	20 m³
24.2.6. Control of consumer exposure: Air care, instant	action (aerosol sprays) (premium grade only) (PC3)
PC3 Air care products	
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency an	d duration of use/exposure
Amounts used per event	0.1 g
Covers exposure up to	365 days/yr
Covers exposure up to	0.25 h/event
Covers exposure up to,4 times a day	
Conditions and measures related to information and b	ehavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers use in room size of	20 m³
	ous action (solid and liquid) (premium grade only) (PC3)
PC3 Air care products	
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 10 %
Amount used (or contained in articles), frequency an	d duration of use/exposure
Amounts used per event	0.48 g
Covers exposure up to	364 days/yr
Covers exposure up to,1 time a day	
Covers exposure up to	8 h/event
covoic expectate up to	O HIGHORIA
Conditions and measures related to information and b	pehavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	35.7 cm ²
Covers use in room size of	20 m³
24.2.8. Control of consumer exposure: Washing car wir	dow (PC4)
PC4 Anti-Freeze and De-icing	products
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 1 %
Amount used (or contained in articles), frequency an	·
Amounts used per event	0.5 g
Covers exposure up to	364 days/yr
Covers exposure up to	0.02 h/event
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
Covers use in a one car garage (34 m³) under typical	
ventilation	inter (BCA)
24.2.9. Control of consumer exposure: Pouring into rad PC4 Anti-Freeze and De-icing	
	HORDIES.

08/08/2022 (Revision date) IE - en 254/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 10 %
Amount used (or contained in articles), frequency ar	nd duration of use/exposure
Amounts used per event	2000 g
Covers exposure up to	364 days/yr
Covers exposure up to	0.17 h/event
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
Covers skin contact area up to	428 cm ²
Covers use in a one car garage (34 m³) under typical ventilation	
4.2.10. Control of consumer exposure: Lock de-icer (F	PC4)
PC4 Anti-Freeze and De-icing	products
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency ar	nd duration of use/exposure
Amounts used per event	4 g
Covers exposure up to	364 days/yr
Covers exposure up to	0.25 h/event
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
Covers skin contact area up to	214.4 cm ²
Covers use in a one car garage (34 m³) under typical	217.7 011
ventilation	
4.2.11. Control of consumer exposure: Waterborne lat	· · · · · ·
PC9a Coatings and paints, thinn	ners, paint removers
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 1,5 %
Amount used (or contained in articles), frequency ar	nd duration of use/exposure
Amounts used per event	2760 g
Covers exposure up to	11 days/yr
Covers exposure up to	2.2 h/event
Covers exposure up to,1 time a day	
Conditions and measures related to information and l	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	428.75 cm ²
Covers use in room size of	20 m³
4.2.12. Control of consumer exposure: Solvent rich, h	igh solid, water borne paint (PC9a)
PC9a Coatings and paints, thinn	ners, paint removers
4.2.13. Control of consumer exposure: Coatings and p	paints, thinners, paint removers - Aerosol spray can (PC9a)
PC9a Coatings and paints, thinn	
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency ar	nd duration of use/exposure
Amounts used per event	215 g
Covers exposure up to	11 days/yr
Covers exposure up to	0.33 h/event
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
candidate and an exposure	
Covers use in a one car garage (34 m³) under typical	

08/08/2022 (Revision date) IE - en 255/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

		nt-, glue-, wall paper-, sealant-remover) (PC9a)
PC9a	Coatings and paints, thinn	ers, paint removers
Product (article) characteris		
Concentration of substance in	n product	Limit the substance in product to 100 %
Amount used (or contained	in articles), frequency an	d duration of use/exposure
Amounts used per event		491 g
Covers exposure up to		11 days/yr
Covers exposure up to		2 h/event
Covers exposure up to,1 time	a day	
Conditions and measures re	lated to information and b	pehavioural advice to consumers
Covers use under typical hous	ehold ventilation	
Other conditions affecting of	consumer exposure	
Covers skin contact area up t	0	857.5 cm ²
Covers use in room size of		20 m ³
.2.15. Control of consumer of	exposure: Fillers and putt	y (PC9b)
PC9b	Fillers, putties, plasters, m	odelling clay
Product (article) characteris	stics	
Concentration of substance in		Limit the substance in product to 2 %
	•	·
Amount used (or contained	in articles), frequency an	d duration of use/exposure
Amounts used per event		85 g
Covers exposure up to		51 days/yr
Covers exposure up to		4 h/event
Covers exposure up to,1 time	a day	
Other conditions affecting of	· ·	25.72 cm²
Covers skin contact area up t	0	35.73 cm ²
Covers use in room size of	District 10	20 m³
.2.16. Control of consumer e	<u>'</u>	
PC9b	Fillers, putties, plasters, m	odelling clay
Deschief (auticle) also as a trait		
Product (article) characteris	stics	
Concentration of substance in		Limit the substance in product to 2 %
Concentration of substance in	n product	
Concentration of substance in Amount used (or contained	n product	•
Concentration of substance in	n product	d duration of use/exposure
Concentration of substance in Amount used (or contained Amounts used per event	n product	d duration of use/exposure
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to	n product I in articles), frequency an	d duration of use/exposure 13800 g 51 days/yr
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time	n product I in articles), frequency an e a day	d duration of use/exposure 13800 g 51 days/yr
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re	n product I in articles), frequency an e a day lated to information and b	d duration of use/exposure 13800 g 51 days/yr 2 h/event
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time Conditions and measures re	n product I in articles), frequency an a day lated to information and b	d duration of use/exposure 13800 g 51 days/yr 2 h/event
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical house	n product I in articles), frequency an e a day lated to information and b ehold ventilation consumer exposure	d duration of use/exposure 13800 g 51 days/yr 2 h/event
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical house Other conditions affecting of	n product I in articles), frequency an e a day lated to information and b ehold ventilation consumer exposure	d duration of use/exposure 13800 g 51 days/yr 2 h/event cehavioural advice to consumers
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical house Other conditions affecting of Covers skin contact area up to Covers use in room size of	n product I in articles), frequency an a day lated to information and b ehold ventilation consumer exposure	d duration of use/exposure 13800 g 51 days/yr 2 h/event pehavioural advice to consumers 857.5 cm² 20 m³
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical house Other conditions affecting of Covers skin contact area up to Covers use in room size of	n product I in articles), frequency an a day lated to information and b ehold ventilation consumer exposure	d duration of use/exposure 13800 g 51 days/yr 2 h/event pehavioural advice to consumers 857.5 cm² 20 m³ (PC9b)
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical hous Other conditions affecting of Covers use in room size of 2.17. Control of consumer of	e a day lated to information and be ehold ventilation consumer exposure coexposure: Modelling clay Fillers, putties, plasters, m	d duration of use/exposure 13800 g 51 days/yr 2 h/event pehavioural advice to consumers 857.5 cm² 20 m³ (PC9b)
Concentration of substance in Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures re Covers use under typical house Other conditions affecting of Covers use in room size of 2.17. Control of consumer of PC9b Product (article) characteris	n product l in articles), frequency an a day lated to information and behold ventilation consumer exposure to exposure: Modelling clay Fillers, putties, plasters, m	d duration of use/exposure 13800 g 51 days/yr 2 h/event behavioural advice to consumers 857.5 cm² 20 m³ (PC9b) odelling clay
Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time Conditions and measures recovers use under typical house Covers skin contact area up to Covers use in room size of 1.2.17. Control of consumer Copeda Product (article) characteris Concentration of substance in	e a day lated to information and be ehold ventilation consumer exposure coexposure: Modelling clay Fillers, putties, plasters, mestics n product	d duration of use/exposure 13800 g 51 days/yr 2 h/event behavioural advice to consumers 857.5 cm² 20 m³ (PC9b) odelling clay Limit the substance in product to 1 %
Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to,1 time Conditions and measures recovers use under typical house Covers skin contact area up to Covers use in room size of 1.2.17. Control of consumer of PC9b Product (article) characterist Concentration of substance in Amount used (or contained)	e a day lated to information and be ehold ventilation consumer exposure coexposure: Modelling clay Fillers, putties, plasters, mestics n product lin articles), frequency an	d duration of use/exposure 13800 g 51 days/yr 2 h/event cehavioural advice to consumers 857.5 cm² 20 m³ (PC9b) odelling clay Limit the substance in product to 1 % d duration of use/exposure
Amount used (or contained Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time Conditions and measures recovers use under typical house Covers skin contact area up to Covers use in room size of 1.2.17. Control of consumer Copeda Product (article) characteris Concentration of substance in	e a day lated to information and be ehold ventilation consumer exposure coexposure: Modelling clay Fillers, putties, plasters, mestics n product lin articles), frequency an	d duration of use/exposure 13800 g 51 days/yr 2 h/event cehavioural advice to consumers 857.5 cm² 20 m³ (PC9b) odelling clay Limit the substance in product to 1 %

08/08/2022 (Revision date) IE - en 256/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

	id Substance type: Mono-constituent
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
Covers skin contact area up to	254.4 cm ²
24.2.18. Control of consumer exposure: Finger paints	(PC9c)
PC9c Finger paints	
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency a	and duration of use/exposure
For each use event, assumes swallowed amount of :	1.35 g
Covers exposure up to	364 days/yr
Covers exposure up to,1 time a day	
Other conditions affecting consumer exposure	
Covers skin contact area up to	254.4 cm ²
24.2.19. Control of consumer exposure: Solvent rich,	
PC15 Non-metal-surface treat	ment products
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 27.5 %
Amount used (or contained in articles), frequency a	and duration of use/exposure
Amounts used per event	744 g
Covers exposure up to Covers exposure up to	11 days/yr 2.2 h/event
Covers exposure up to,1 time a day	Z.Z Trevent
Conditions and measures related to information and	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	428.75 cm ²
Covers use in room size of	20 m³
24.2.20. Control of consumer exposure: Non-metal-su	rface treatment products - Aerosol spray can (PC15)
PC15 Non-metal-surface treati	ment products
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency a	and duration of use/exposure
Amounts used per event	215 g
Covers exposure up to	11 days/yr 0.33 h/event
Covers exposure up to Covers exposure up to,1 time a day	0.00 H/GVGIIL
Other conditions affecting consumer exposure Covers use in a one car garage (34 m³) under typical	
ventilation 24.2.21. Control of consumer exposure: Removers (page 1)	sint- glue- wall naner- sealant-remover) (PC15)
PC15 Non-metal-surface treating	
Product (article) characteristics	Limit the substance in product to 50 %
	Little the substance in product to 50 70
Concentration of substance in product	and direction of cooleymoning
Amount used (or contained in articles), frequency a	·
Amount used (or contained in articles), frequency and Amounts used per event	491 g
Amount used (or contained in articles), frequency a	·
Amount used (or contained in articles), frequency and Amounts used per event Covers exposure up to	491 g 11 days/yr
Amount used (or contained in articles), frequency a Amounts used per event Covers exposure up to Covers exposure up to Covers exposure up to,1 time a day	491 g 11 days/yr 2 h/event
Amount used (or contained in articles), frequency and Amounts used per event Covers exposure up to Covers exposure up to	491 g 11 days/yr 2 h/event

08/08/2022 (Revision date) 257/265 IE - en

ventilation

PC24

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Other conditions affecting consumer exposure)	
Covers skin contact area up to	857.5 cm ²	
Covers use in room size of	20 m ³	
24.2.22. Control of consumer exposure: liquids (F	C24)	

4.2.22. Control of consumer exposure: liquids (PC24)		
PC24	Lubricants, greases, release products	
Product (article) characteristics		
Concentration of substance i	n product	Limit the substance in product to 100 %
Amount used (or contained in articles), frequency and duration of use/exposure		
Amounts used per event		2200 g
Covers exposure up to		11 days/yr
Covers exposure up to		0.17 h/event
Covers exposure up to,1 time a day		
Other conditions affecting consumer exposure		
Covers skin contact area up	to	468 cm ²
Covers use in a one car gara	ige (34 m³) under typical	

24.2.22 Control of	concurrence over course Dectes (DC24)

4.2.25. Control of Consumer exposure. Fastes (FC24)			
PC24	Lubricants, greases, release	se products	
Product (article) characteristics			
Concentration of substance i	n product	Limit the substance in product to 20 %	
Amount used (or contained in articles), frequency and duration of use/exposure			
Amounts used per event	Amounts used per event 34 g		
Covers exposure up to		11 days/yr	
Covers exposure up to,1 time a day			
Other conditions affecting consumer exposure			
Covers skin contact area up	to	468 cm ²	

24.2.24. Control of consumer exposure: Lubricants, Greases and Release Products - Sprays (PC24) Lubricants, greases, release products

Product (article) characteristics		
Concentration of substance in product	Limit the substance in product to 50 %	
Amount used (or contained in articles), frequency and duration of use/exposure		
Amounts used per event	73 g	
Covers exposure up to	11 days/yr	
Covers exposure up to	0.17 h/event	
Covers exposure up to,1 time a day		

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other conditions affecting consumer exp	osure	
Covers skin contact area up to	428.75 cm ²	
Covers use in room size of	20 m³	

24.2.25. Control of consumer exposure: Polishes, wax / cream (floor, furniture, shoes) (PC31)

PC31	Polishes and wax blends	
Product (article) characteristics		
Concentration of substance i	n product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency and duration of use/exposure		
Amounts used per event		142 g
Covers exposure up to		51 days/yr
Covers exposure up to		1.23 h/event
Covers exposure up to,1 time	e a day	

08/08/2022 (Revision date) IE - en 258/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Conditions and measures related to information and	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	430 cm ²
Covers use in room size of	20 m³
4.2.26. Control of consumer exposure: Polishes, spr	ay (furniture, shoes) (PC31)
PC31 Polishes and wax blends	5
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 50 %
Amount used (or contained in articles), frequency a	and duration of use/avnosure
Amounts used per event	35 g
Covers exposure up to	11 days/yr
Covers exposure up to	0.33 h/event
Covers exposure up to,1 time a day	
Conditions and measures related to information and	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	430 cm ²
Covers use in room size of	20 m³
1.2.27. Control of consumer exposure: Laundry and	
PC35 Washing and cleaning p	
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 5 %
·	·
Amount used (or contained in articles), frequency a	
Amounts used per event Covers exposure up to	15 g 364 days/yr
Covers exposure up to	0.5 h/event
Covers exposure up to,1 time a day	
Conditions and measures related to information and	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Other conditions affecting consumer exposure Covers skin contact area up to	857.5 cm ²
Covers use in room size of	20 m ³
	ids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet
eaners, metal cleaners) (PC35)	indo (air parpece dicarrore, carricary products, ricer dicarrore, grace cicarrore, carpet
PC35 Washing and cleaning p	roducts
Product (article) characteristics	
Concentration of substance in product	Limit the substance in product to 5 %
Amount used (or contained in articles), frequency a	and duration of use/exposure
Amounts used per event	27 g
Covers exposure up to	364 days/yr
Covers exposure up to	0.33 h/event
Covers exposure up to,1 time a day	
Conditions and measures related to information and	behavioural advice to consumers
Covers use under typical household ventilation	
Other conditions affecting consumer exposure	
Covers skin contact area up to	857.5 cm ²
Covers use in room size of	20 m³

08/08/2022 (Revision date) IE - en 259/265

PC38

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

24.2.29. Control of consumer exposure: Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) (PC35)

	, 3,5		
PC35	Washing and cleaning pro	ducts	
	31 31 44 44		
Product (article) characteristics			
Concentration of substance i	n product	Limit the substance in product to 15 %	
	•		
Amount used (or contained in articles), frequency and duration of use/exposure			
Amounts used per event		35 g	
Covers exposure up to		364 days/yr	
Covers exposure up to		0.17 h/event	
Covers exposure up to,1 time	e a day		

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other conditions affecting consumer exposure

Covers skin contact area up to 428 cm²
Covers use in room size of 20 m³

24.2.30. Control of consumer exposure: Welding and soldering products, flux products (PC38)

Welding and soldering products, flux products

Product (article) characteristics		
Concentration of substance in product	Limit the substance in product to 20 %	
Amount used (or contained in articles), frequency and duration of use/exposure		
Amounts used per event	12 g	
Covers exposure up to	364 days/yr	
Covers exposure up to	1 h/event	
Covers exposure up to,1 time a day		

Conditions and measures related to information and behavioural advice to consumers

Covers use under typical household ventilation

Other conditions affecting consumer exposure

Covers use in room size of 20 m³

24.2.31. Control of consumer exposure: Cosmetics, personal care products (premium grade only) (PC39)

PC39 Cosmetics, personal care products

Product (article) characteristics

Physical form of product Liquid

24.3. Exposure estimation and reference to its source

24.3.1. Environmental release and exposure Contributing scenario controlling environmental exposure (ERC8d)

Release route	Release rate	Release estimation method
Release fraction to wastewater	100 %	ERC
Release to waste water from process	106.6 kg/day	ERC
Release fraction to air from process	100 %	ERC
Release fraction to soil from process	20 %	ERC

Protection target	Unit	Exposure estimation	PNEC	RCR	Assessment method
Freshwater	mg/l	1.412	10.6	0.133	EUSES v2.1.2
Marine water	mg/l	0.136	1.06	0.128	EUSES v2.1.2
Freshwater sediment	mg/kg	6.191	30.4	0.204	EUSES v2.1.2
Marine water sediment	mg/kg	0.598	3.04	0.197	EUSES v2.1.2
Sewage treatment plant	mg/l	6.637	100	0.066	EUSES v2.1.2
Soil	mg/kg	0.12	29.5	0.004	EUSES v2.1.2

24.3.2. Consumer exposure Glues, hobby use (PC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2

08/08/2022 (Revision date) IE - en 260/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Dermal - Long-term - systemic effects	1.79 mg/kg bw/day	0.029	{0} EGRET v2
Inhalation - Long-term - systemic effects	8.52 mg/m ³	0.043	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.072	

24.3.3. Consumer exposure Glue from spray (PC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.09 mg/kg bw/day	0.001	{0} EGRET v2
Inhalation - Long-term - systemic effects	80.06 mg/m ³	0.4	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.401	

24.3.4. Consumer exposure Sealants, including foam applications (PC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	1.79 mg/kg bw/day	0.029	{0} EGRET v2
Inhalation - Long-term - systemic effects	35.75 mg/m³	0.179	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.208	

24.3.5. Consumer exposure Glues DIY-use (carpet glue, tile glue, wood parquet glue) (PC1)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	3 mg/kg bw/day	0.048	{0} EGRET v2
Inhalation - Long-term - systemic effects	64.74 mg/m³	0.324	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.372	

24.3.6. Consumer exposure Air care, instant action (aerosol sprays) (premium grade only) (PC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Inhalation - Long-term - systemic effects	0.1 mg/m ³	0.001	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.001	

24.3.7. Consumer exposure Air care, continuous action (solid and liquid) (premium grade only) (PC3)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.06 mg/kg bw/day	0.001	{0} EGRET v2
Inhalation - Long-term - systemic effects	0.17 mg/m ³	0.001	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.002	

24.3.8. Consumer exposure Washing car window (PC4)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2

08/08/2022 (Revision date) IE - en 261/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Inhalation - Long-term -	0 mg/m³	0	{0} EGRET v2
systemic effects Sum RCR - Long-term -		0	
systemic effects 24.3.9. Consumer exposure Pouri	ing into radiator (PC4)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	7.13 mg/kg bw/day	0.115	{0} EGRET v2
Inhalation - Long-term - systemic effects	1.84 mg/m³	0.009	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.124	
24.3.10. Consumer exposure Loc	k de-icer (PC4)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	17.87 mg/kg bw/day	0.288	{0} EGRET v2
Inhalation - Long-term - systemic effects	0.51 mg/m³	0.003	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.291	
24.3.11. Consumer exposure Wat			
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.04 mg/kg bw/day	0.001	{0} EGRET v2
Inhalation - Long-term - systemic effects	105.3 mg/m³	0.527	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.528	
24.3.12. Consumer exposure Solv	vent rich, high solid, water bo	rne paint (PC9a)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	2.75 mg/kg bw/day	0.044	{0} EGRET v2
Inhalation - Long-term - systemic effects	20.83 mg/m ³	0.104	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.148	
24.3.13. Consumer exposure Coa	tings and paints, thinners, pa	aint removers - Aerosol sp	ray can (PC9a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Inhalation - Long-term - systemic effects	34.29 mg/m³	0.171	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.171	
24.3.14. Consumer exposure Rem	novers (paint-, glue-, wall pap	er-, sealant-remover) (PC9	a)
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	10 mg/kg bw/day	0.161	{0} EGRET v2
Inhalation - Long-term - systemic effects	47.65 mg/m³	0.238	{0} EGRET v2

08/08/2022 (Revision date) IE - en 262/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

Sum RCR - Long-term - systemic effects		0.399	
3.15. Consumer exposure Fille	ers and putty (PC9b)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.02 mg/kg bw/day	0	{0} EGRET v2
Inhalation - Long-term - systemic effects	5.37 mg/m³	0.027	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.027	
· ·	sters and floor equalizers (PC9b)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.2 mg/kg bw/day	0.003	{0} EGRET v2
Inhalation - Long-term - systemic effects	133.9 mg/m³	0.67	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.673	
3.17. Consumer exposure Mod	delling clay (PC9b)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	1 mg/kg bw/day	0.016	{0} EGRET v2
Dermal - Long-term - systemic effects	2.54 mg/kg bw/day	0.041	{0} EGRET v2
Inhalation - Long-term - systemic effects	0 mg/m³	0	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.057	
3.18. Consumer exposure Fing	ger paints (PC9c)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	6.24 mg/kg bw/day	0.101	{0} EGRET v2
Dermal - Long-term - systemic effects	11.76 mg/kg bw/day	0.19	{0} EGRET v2
Inhalation - Long-term - systemic effects		0	{0} EGRET v2
_*	0 mg/m³		. ,
Sum RCR - Long-term - systemic effects	ū	0.291	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv	vent rich, high solid, water borne p	0.291 paint (PC15)	
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects	vent rich, high solid, water borne p Exposure estimate	0.291 paint (PC15) RCR	Method
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day	0.291 paint (PC15) RCR 0	{0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day	0.291 Daint (PC15) RCR 0 0.044	{0} EGRET v2 {0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day	0.291 paint (PC15) RCR 0 0.044 0.104	{0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148	{0} EGRET v2 {0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects 3.20. Consumer exposure Nor	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148 s - Aerosol spray can (PC15)	{0} EGRET v2 {0} EGRET v2 {0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects 3.20. Consumer exposure Nor Route of exposure and type of effects	Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148 s - Aerosol spray can (PC15) RCR	{0} EGRET v2 {0} EGRET v2 {0} EGRET v2 Method
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects 3.20. Consumer exposure Nor Route of exposure and type of effects Oral - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³ n-metal-surface treatment products Exposure estimate 0 mg/kg bw/day	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148 S - Aerosol spray can (PC15) RCR 0	{0} EGRET v2 {0} EGRET v2 {0} EGRET v2 Method {0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects 3.20. Consumer exposure Nor Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects	Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148 S - Aerosol spray can (PC15) RCR 0 0	{0} EGRET v2 {0} EGRET v2 {0} EGRET v2 Method {0} EGRET v2 {0} EGRET v2
Sum RCR - Long-term - systemic effects 3.19. Consumer exposure Solv Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects Inhalation - Long-term - systemic effects Sum RCR - Long-term - systemic effects 3.20. Consumer exposure Nor Route of exposure and type of effects Oral - Long-term - systemic effects Dermal - Long-term - systemic effects	vent rich, high solid, water borne p Exposure estimate 0 mg/kg bw/day 2.75 mg/kg bw/day 20.83 mg/m³ n-metal-surface treatment products Exposure estimate 0 mg/kg bw/day	0.291 Daint (PC15) RCR 0 0.044 0.104 0.148 S - Aerosol spray can (PC15) RCR 0	{0} EGRET v2 {0} EGRET v2 {0} EGRET v2 Method {0} EGRET v2

263/265 08/08/2022 (Revision date) IE - en

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

oute of exposure and type	novers (paint-, glue-, wall paper- Exposure estimate	RCR	Method
of effects	·		
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	5 mg/kg bw/day	0.081	{0} EGRET v2
nhalation - Long-term - systemic effects	23.83 mg/m³	0.119	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.2	
3.22. Consumer exposure liqui	ids (PC24)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	10 mg/kg bw/day	0.161	{0} EGRET v2
nhalation - Long-term -	0.16 mg/m ³	0.001	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.162	
3.23. Consumer exposure Past	tes (PC24)		
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.62 mg/kg bw/day	0.01	{0} EGRET v2
nhalation - Long-term -	0 mg/m³	0	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.01	
3.24. Consumer exposure Lub	ricants, Greases and Release P	roducts - Sprays (PC24)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	1.43 mg/kg bw/day	0.023	{0} EGRET v2
nhalation - Long-term - systemic effects	12.29 mg/m³	0.061	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.084	
3.25. Consumer exposure Poli	shes, wax / cream (floor, furnitu	re, shoes) (PC31)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	5 mg/kg bw/day	0.081	{0} EGRET v2
nhalation - Long-term -	25.73 mg/m³	0.129	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.21	
3.26. Consumer exposure Poli	shes, spray (furniture, shoes) (F	PC31)	
Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	1.43 mg/kg bw/day	0.023	{0} EGRET v2
nhalation - Long-term -	10.92 mg/m³	0.055	{0} EGRET v2

08/08/2022 (Revision date) IE - en 264/265

ANNEX TO THE SAFETY DATA SHEET: Exposure scenario

CAS-No.: 67-64-1 Product form: Substance Physical state: Liquid Substance type: Mono-constituent

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24.3.27. Consumer ex	posure Lauriur	y anu uisn wasnin	g products (PG33)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0.07 mg/kg bw/day	0.001	{0} EGRET v2
Inhalation - Long-term - systemic effects	0.67 mg/m ³	0.003	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.004	

24.3.28. Consumer exposure Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners) (PC35)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	7.15 mg/kg bw/day	0.115	{0} EGRET v2
Inhalation - Long-term - systemic effects	0.84 mg/m³	0.004	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.119	

24.3.29. Consumer exposure Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners) (PC35)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	10.7 mg/kg bw/day	0.173	{0} EGRET v2
Inhalation - Long-term - systemic effects	1.77 mg/m³	0.009	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.182	

24.3.30. Consumer exposure Welding and soldering products, flux products (PC38)

Route of exposure and type of effects	Exposure estimate	RCR	Method
Oral - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Dermal - Long-term - systemic effects	0 mg/kg bw/day	0	{0} EGRET v2
Inhalation - Long-term - systemic effects	3.76 mg/m³	0.019	{0} EGRET v2
Sum RCR - Long-term - systemic effects		0.019	

24.3.31. Consumer exposure Cosmetics, personal care products (premium grade only) (PC39)

Information for contributing exposure scenario

In accordance to the Article 14 (5b) of the REACH Regulation (EC) No 1907/2006, exposure estimation and risk characterisation for human health does not need to be performed for end uses in cosmetic products within the scope of Directive 76/768/EEC

24.4. Guidance to Downstream User to evaluate whether he works inside the boundaries set by the ES

24.4.1. Environment

Guidance - Environment	No additional risk management measures, besides those that are mentioned above, are needed to guarantee safe use for environment.

24.4.2. Health

Guidance - Health	No additional risk management measures, besides those that are mentioned above, are needed to
	guarantee safe use for consumers

08/08/2022 (Revision date) IE - en 265/265