According to EC No 1907/2006 as amended as at the date of this SDS

# **Methyl PROXITOL Acetate**

Version Revision Date: SDS Number: Date of last issue: 07.03.2023

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

#### 1.1 Product identifier

Trade name : Methyl PROXITOL Acetate

Product code : U5126

Registration number EU : 01-2119475791-29

Synonyms: 1-methoxy-2-propanol acetate, 1-methoxy-2-propyl acetate,

PGMEA, PMA

CAS-No. : 108-65-6

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

Use of the Sub- : Solvent.

stance/Mixture Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Uses advised against : This product must not be used in applications other than the

above without first seeking the advice of the supplier.

### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier : Shell Chemicals Europe B.V.

PO Box 2334

3000 CH Rotterdam

Netherlands

Telephone : +31 (0)10 441 5137 / +31 (0)10 441 5191 Telefax : +31 (0)20 716 8316/ +31 (0)20 713 9230

Contact for Safety Data : sccmsds@shell.com

Sheet

### 1.4 Emergency telephone number

+44 (0) 1235 239 670 (This telephone number is available 24 hours per day, 7 days per

week)

Poison Center Information: +358 9 471 977 (24h)

#### 1.5 Other information

KT code : 48 Solvents

TOL code : 246 Production of other chemical products

Other information : PROXITOL is a trademark owned by Shell Trademark Man-

agement B.V. and Shell Brands Inc. and used by affiliates of

Shell plc.

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### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

## Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3 H226: Flammable liquid and vapour.

Specific target organ toxicity - single exposure, Category 3, Oral, Central nervous system

H336: May cause drowsiness or dizziness.

#### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





Signal word : Warning

Hazard statements : PHYSICAL HAZARDS:

H226 Flammable liquid and vapour.

**HEALTH HAZARDS:** 

H336 May cause drowsiness or dizziness.

ENVIRONMENTAL HAZARDS:

Not classified as environmental hazard according to

CLP criteria.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks, open

flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting

equipment.

P242 Use only non-sparking tools.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P271 Use only outdoors or in a well-ventilated area.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or show-

er.

P370 + P378 In case of fire: Use appropriate media to extin-

guish.

P304 + P340 IF INHALED: Remove person to fresh air and

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keep comfortable for breathing.

P312 Call a POISON CENTER/ doctor if you feel unwell.

### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up. P235 Keep cool.

### Disposal:

P501 Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

#### 2.3 Other hazards

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger.

Even with proper grounding and bonding, this material can still accumulate an electrostatic charge.

If sufficient charge is allowed to accumulate, electrostatic discharge and ignition of flammable airvapour mixtures can occur.

Slightly irritating to respiratory system.

Slightly irritating to the eye.

Repeated exposure may cause skin dryness or cracking.

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

#### Components

Chemical name	CAS-No.	Concentration (% w/w)
	EC-No.	
1-Methoxy-2-	108-65-6	>= 99,8
acetoxypropane	203-603-9	

### **Further information**

### Contains:

0011101			
Chemical	Identification number	Classification	Concentration (% w/w)
name			
2-	70657-70-4, 274-		< 0,1
methoxypropyl	724-2		
acetate			

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2- methoxypropa- nol	1589-47-5, 216-455- 5	Flam. Liq.3; H226 Skin Irrit.2; H315 Eye Dam.1; H318 STOT SE3; H335 Repr.1B; H360D	<= 0,01
1- Methoxypro- pane-2-ol	107-98-2, 203-539-1	Flam. Liq.3; H226 STOT SE3; H336	<= 0,01
Butylated hy- droxytoluene	128-37-0, 204-881-4	Aquatic Chronic1; H410 Aquatic Acute1; H400	<= 0,0025

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : Not expected to be a health hazard when used under normal

conditions.

Protection of first-aiders : When administering first aid, ensure that you are wearing the

appropriate personal protective equipment according to the

incident, injury and surroundings.

If inhaled : Remove to fresh air. If rapid recovery does not occur,

transport to nearest medical facility for additional treatment.

In case of skin contact : Remove contaminated clothing. Flush exposed area with wa-

ter and follow by washing with soap if available.

If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.

Remove contact lenses, if present and easy to do. Continue

rinsing.

If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities

are swallowed, however, get medical advice.

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

Symptoms : Breathing of high vapour concentrations may cause central

nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and

death.

Skin irritation signs and symptoms may include a burning sen-

sation, redness, or swelling.

Eye irritation signs and symptoms may include a burning sen-

sation, redness, swelling, and/or blurred vision.

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Ingestion may result in nausea, vomiting and/or diarrhoea.

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

Treatment : Call a doctor or poison control center for guidance.

Treat symptomatically.

Causes central nervous system depression.

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam, water spray or fog. Dry chemical pow-

der, carbon dioxide, sand or earth may be used for small fires

only.

Unsuitable extinguishing

media

None

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Carbon monoxide may be evolved if incomplete combustion

occurs.

#### 5.3 Advice for firefighters

Special protective equipment :

for firefighters

Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to

relevant Standards (e.g. Europe: EN469).

Specific extinguishing meth-

ods

Standard procedure for chemical fires.

Further information : Clear fire area of all non-emergency personnel.

Keep adjacent containers cool by spraying with water.

### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Observe the relevant local and international regulations

Notify authorities if any exposure to the general public or the

environment occurs or is likely to occur.

Local authorities should be advised if significant spillages

cannot be contained.

The vapour is heavier than air, spreads along the ground and

distant ignition is possible.

Vapour may form an explosive mixture with air.

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6.1.1 For non emergency personnel:

Avoid contact with skin, eyes and clothing.

Isolate hazard area and deny entry to unnecessary or unpro-

tected personnel.

Stay upwind and keep out of low areas.

6.1.2 For emergency responders:

Avoid contact with skin, eyes and clothing.

Isolate hazard area and deny entry to unnecessary or unpro-

tected personnel.

Stay upwind and keep out of low areas.

### 6.2 Environmental precautions

**Environmental precautions** 

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

Ventilate contaminated area thoroughly.

Monitor area with combustible gas indicator.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up

For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely For small liquid spills (< 1 drum), transfer by mechanical means to a labeled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

#### 6.4 Reference to other sections

For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

# **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures

Avoid breathing of or direct contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see

Section 8 of this Safety Data Sheet.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropri-

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ate controls for safe handling, storage and disposal of this

material.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

Advice on safe handling : Avoid contact with skin, eyes and clothing.

Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols.

Bulk storage tanks should be diked (bunded).

Extinguish any naked flames. Do not smoke. Remove ignition

sources. Avoid sparks.

Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment to

reduce the risk.

The vapours in the head space of the storage vessel may lie in the flammable/explosive range and hence may be flamma-

ble.

Properly dispose of any contaminated rags or cleaning mate-

rials in order to prevent fires.

Do NOT use compressed air for filling, discharging, or han-

dling operations.

Product Transfer : Refer to guidance under Handling section.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: The vapour is heavier than air. Beware of accumulation in pits and confined spaces. Refer to section 15 for any additional specific legislation covering the packaging and storage of this

product.

Packaging material : Suitable material: For containers, or container linings use mild

steel, stainless steel.

Unsuitable material: Natural, butyl, neoprene or nitrile rubbers.

Container Advice : Containers, even those that have been emptied, can contain

explosive vapours. Do not cut, drill, grind, weld or perform

similar operations on or near containers.

### 7.3 Specific end use(s)

Specific use(s) : Please refer to section 16 and/or the annexes for the regis-

tered uses under REACH.

Ensure that all local regulations regarding handling and stor-

age facilities are followed.

See additional references that provide safe handling practices: American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practices

on Static Electricity).

IEC/TS 60079-32-1: Electrostatic hazards, guidance

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# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

## **Occupational Exposure Limits**

Components		I		1
	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
1-Methoxy-2-	108-65-6	HTP values 8h	50 ppm	FI OEL
acetoxypropane			270 mg/m3	
	Further information: The health risk of absorbed amounts of compounds which			
	can pass through the skin to the body cannot be evaluated from their atmos-			
			ese compounds have the no	
	the list. Many compounds can be irritating or corrosive when in contact with			contact with
4.84.4	the skin, espe	cially strong acids a		T =1 0=1
1-Methoxy-2-		HTP values 15	100 ppm	FI OEL
acetoxypropane	F 40	min	550 mg/m3	
			k of absorbed amounts of co	
			ody cannot be evaluated fro	
			ese compounds have the not	
			irritating or corrosive when in	contact with
4 Mathaur O	the skin, espe	cially strong acids a		2000/39/EC
1-Methoxy-2-		STEL	100 ppm	2000/39/EC
acetoxypropane	Further inform	otion, Idontifica tha	550 mg/m3 possibility of significant uptak	(a through the
1			possibility of significant uptar	te inrough the
1-Methoxy-2-	skin, Indicativ	TWA	50 nnm	2000/39/EC
acetoxypropane		IVVA	50 ppm	2000/39/EC
aceloxyproparie	275 mg/m3  Further information: Identifies the possibility of significant uptake through the			
	Eurthor inform	ation: Identified the	possibility of significant untak	o through the
	Further inform skin, Indicative		possibility of significant uptak	ce through the
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1- Methoxypropane-	skin, Indicativ	e	, , ,	
=	skin, Indicativ	e	100 ppm	
Methoxypropane-	skin, Indicative 107-98-2 Further inform	e HTP values 8h ation: The health ris	100 ppm 370 mg/m3 k of absorbed amounts of co	FI OEL mpounds which
Methoxypropane-	skin, Indicative 107-98-2  Further inform can pass through	e HTP values 8h ation: The health risugh the skin to the b	100 ppm 370 mg/m3 k of absorbed amounts of co ody cannot be evaluated fro	FI OEL mpounds which m their atmos-
Methoxypropane-	skin, Indicative 107-98-2  Further inform can pass througheric concent	e HTP values 8h nation: The health risugh the skin to the butration. Therefore th	100 ppm 370 mg/m3  k of absorbed amounts of co ody cannot be evaluated fro ese compounds have the no	FI OEL mpounds which m their atmos- tification 'skin'in
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Methoxypropane- 2-ol	skin, Indicative 107-98-2  Further inform can pass througheric concenthe list. Many	e HTP values 8h nation: The health ris ugh the skin to the b stration. Therefore th compounds can be cially strong acids a	100 ppm 370 mg/m3  k of absorbed amounts of co ody cannot be evaluated fro ese compounds have the no irritating or corrosive when in nd bases.	FI OEL  mpounds which m their atmos- tification 'skin'in contact with
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**Biological occupational exposure limits** 

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No biological limit allocated.

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
1-Methoxy-2- acetoxypropane	Workers	Dermal	Long-term systemic effects	153,5 mg/kg bw/day
1-Methoxy-2- acetoxypropane	Workers	Inhalation	Long-term systemic effects	275 mg/m3
1-Methoxy-2- acetoxypropane	Consumers	Dermal	Long-term systemic effects	54,8 mg/kg bw/day
1-Methoxy-2- acetoxypropane	Consumers	Inhalation	Long-term systemic effects	33 mg/m3
1-Methoxy-2- acetoxypropane	Consumers	Oral	Long-term systemic effects	1,67 mg/kg bw/day

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
1-Methoxy-2-acetoxypropane	Fresh water	0,635 mg/l
1-Methoxy-2-acetoxypropane	Fresh water sediment	3,29 mg/kg dry weight (d.w.)
1-Methoxy-2-acetoxypropane	Marine sediment	0,329 mg/kg dry weight (d.w.)
1-Methoxy-2-acetoxypropane	Soil	0,29 mg/kg dry weight (d.w.)
1-Methoxy-2-acetoxypropane	Sewage treatment plant	100 mg/l

#### 8.2 Exposure controls

## **Engineering measures**

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:

Use sealed systems as far as possible.

Adequate explosion-proof ventilation to control airborne concentrations below the exposure quidelines/limits.

Local exhaust ventilation is recommended.

Firewater monitors and deluge systems are recommended.

Eye washes and showers for emergency use.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

### General Information:

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

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Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or subsequent recycle.

### Personal protective equipment

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye protection : If material is handled such that it could be splashed into eyes,

protective eyewear is recommended. Approved to EU Standard EN166.

Hand protection

Remarks : Where hand contact with the product may occur the use of

gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. Longer term protection: butyl-

rubber Nitrile rubber gloves.

Incidental contact/Splash protection: Nitrile rubber gloves. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on

izer is recommended.

Skin and body protection : Skin protection is not required under normal conditions of

For prolonged or repeated exposures use impervious clothing

clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moistur-

over parts of the body subject to exposure.

If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to relevant Standard, and provide employee skin care programmes.

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Protective clothing approved to EU Standard EN14605.

Wear antistatic and flame-retardant clothing, if a local risk

assessment deems it so.

Respiratory protection : If engineering controls do not maintain airborne concentra-

tions to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing appa-

ratus.

Where air-filtering respirators are suitable, select an appro-

priate combination of mask and filter.

If air-filtering respirators are suitable for conditions of use: Select a filter suitable for organic gases and vapours [Type A

boiling point > 65°C (149°F)] meeting EN14387.

# **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Colour : clear

Odour : Ethereal

Odour Threshold : Data not available

Melting / freezing point : -65 °C

Boiling point/boiling range : 143 - 149 °C

Flammability

Flammability (solid, gas) : Data not available

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / upper flammability limit

7 %(V)

Lower explosion limit / Lower flammability limit

: 1,5 %(V)

Flash point : 45 °C

Auto-ignition temperature : 333 °C

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Decomposition temperature

Decomposition tempera-

ture

Data not available

pH : Not applicable

Viscosity

Viscosity, dynamic : 1,23 mPa.s (20 °C)

Method: ASTM D445

Viscosity, kinematic : Data not available

Solubility(ies)

Water solubility : 198 g/l (20 °C)

Partition coefficient: n-

octanol/water

log Pow: 1,2

Vapour pressure : 502 Pa (25 °C)

Relative density : 0,96 - 0,97 (20 °C)

Method: ASTM D4052

Density : 967 kg/m3 (20 °C)

Method: ASTM D4052

Relative vapour density : 4,6

Particle characteristics

Particle size : Data not available

9.2 Other information

Explosives : Not applicable

Oxidizing properties : Data not available

Evaporation rate : 0,3

Method: ASTM D 3539, nBuAc=1

Conductivity: > 10,000 pS/m

A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid, This material is not expected to be

a static accumulator.

Surface tension : 27,6 mN/m, 20 °C

Molecular weight : 132 g/mol

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### **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

### 10.2 Chemical stability

No hazardous reaction is expected when handled and stored according to provisions

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with strong oxidising agents.

#### 10.4 Conditions to avoid

Conditions to avoid : Avoid heat, sparks, open flames and other ignition sources.

Prevent vapour accumulation.

In certain circumstances product can ignite due to static elec-

tricity.

### 10.5 Incompatible materials

Materials to avoid : Strong oxidising agents.

#### 10.6 Hazardous decomposition products

Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases including carbon monoxide, carbon dioxide, sulphur oxides and unidentified organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

### **SECTION 11: Toxicological information**

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

Information on likely routes of : Exposure may occur via inhalation, ingestion, skin absorption,

exposure skin or eye contact, and accidental ingestion.

#### **Acute toxicity**

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Acute oral toxicity : LD50: > 5000 mg/kg

Remarks: Low toxicity

Acute inhalation toxicity : Remarks: Low toxicity by inhalation.

Acute dermal toxicity : LD50: > 5000 mg/kg

Remarks: Low toxicity

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#### Skin corrosion/irritation

#### **Components:**

### 1-Methoxy-2-acetoxypropane:

Remarks : Not irritating to skin.

Prolonged/repeated contact may cause defatting of the skin

which can lead to dermatitis.

### Serious eye damage/eye irritation

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Remarks : Slightly irritating to the eye.

Based on available data, the classification criteria are not met.

### Respiratory or skin sensitisation

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Remarks : Not a skin sensitiser.

#### Germ cell mutagenicity

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Genotoxicity in vivo : Remarks: Non mutagenic

Based on available data, the classification criteria are not met.

Germ cell mutagenicity- As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

### Carcinogenicity

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Remarks : Not a carcinogen.

Based on available data, the classification criteria are not met.

Carcinogenicity - Assess-

ment

This product does not meet the criteria for classification in

categories 1A/1B.

Material	GHS/CLP Carcinogenicity Classification
1-Methoxy-2-acetoxypropane	No carcinogenicity classification.
2-methoxypropyl acetate	No carcinogenicity classification.

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2-methoxypropanol	No carcinogenicity classification.
1-Methoxypropane-2-ol	No carcinogenicity classification.
Butylated hydroxytoluene	No carcinogenicity classification.

Material	Other Carcinogenicity Classification
Butylated hydroxytoluene	IARC: Group 3: Not classifiable as to its carcinogenicity to humans

### Reproductive toxicity

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Effects on fertility

Remarks: Does not impair fertility., Not a developmental toxi-

cant.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

# STOT - single exposure

### **Components:**

#### 1-Methoxy-2-acetoxypropane:

Remarks : Inhalation of vapours or mists may cause irritation to the res-

piratory system.

#### STOT - repeated exposure

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Remarks : Kidney: caused kidney effects in male rats which are not con-

sidered relevant to humans

Based on available data, the classification criteria are not met.

### **Aspiration toxicity**

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Not an aspiration hazard., Based on available data, the classification criteria are not met.

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#### 11.2 Information on other hazards

### **Endocrine disrupting properties**

**Product:** 

Assessment The substance/mixture does not contain components consid-

> ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

**Further information** 

**Product:** 

Remarks Unless indicated otherwise, the data presented is representa-

tive of the product as a whole, rather than for individual com-

ponent(s).

**Components:** 

1-Methoxy-2-acetoxypropane:

Remarks Classifications by other authorities under varying regulatory

frameworks may exist.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

### **Components:**

1-Methoxy-2-acetoxypropane:

Toxicity to fish : Remarks: Low toxicity

LC/EC/IC50 > 100 mg/l

Toxicity to daphnia and other : Remarks: Low toxicity

aquatic invertebrates

LC/EC/IC50 > 100 mg/l

Toxicity to algae/aquatic plants : Remarks: Low toxicity

LC/EC/IC50 > 100 mg/l

Toxicity to microorganisms

Remarks: Low toxicity LC/EC/IC50 > 100 mg/l

Toxicity to fish (Chronic tox-

icity)

Remarks: NOEC/NOEL > 10 - <=100 mg/l

Toxicity to daphnia and other : Remarks: NOEC/NOEL > 100 mg/l

aquatic invertebrates (Chron-

ic toxicity)

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### 12.2 Persistence and degradability

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Biodegradability : Remarks: Readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

### 12.3 Bioaccumulative potential

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

# 12.4 Mobility in soil

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Mobility : Remarks: Dissolves in water., If product enters soil, it will be

highly mobile and may contaminate groundwater.

#### 12.5 Results of PBT and vPvB assessment

### **Components:**

### 1-Methoxy-2-acetoxypropane:

Assessment : The substance does not fulfill all screening criteria for persis-

tence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB..

### 12.6 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components considered to

have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

#### **Product:**

Additional ecological infor-

mation

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Recover or recycle if possible.

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal meth-

ods in compliance with applicable regulations.

Do not dispose into the environment, in drains or in water

courses.

Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional,

national, and local laws and regulations.

Local regulations may be more stringent than regional or na-

tional requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides tech-

nical aspects at controlling pollutions from ships.

Contaminated packaging : Drain container thoroughly.

After draining, vent in a safe place away from sparks and fire.

Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.

### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADR : 3272
RID : 3272
IMDG : 3272
IATA : 3272

14.2 UN proper shipping name

ADR : ESTERS, N.O.S.

(Propylene Glycol Monomethyl Ether Acetate)

RID : ESTERS, N.O.S.

(Propylene Glycol Monomethyl Ether Acetate)

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**IMDG** : ESTERS, N.O.S.

(Propylene Glycol Monomethyl Ether Acetate)

**IATA** : Esters, n.o.s.

(Propylene Glycol Monomethyl Ether Acetate)

14.3 Transport hazard class(es)

**ADR** 3 RID 3 **IMDG** 3 IATA : 3

### 14.4 Packing group

**ADR** 

Packing group Ш Classification Code F1 Hazard Identification Number : 30 Labels 3

**RID** 

Packing group Ш Classification Code F1 Hazard Identification Number : 30 Labels 3

**IMDG** 

Packing group Ш Labels 3

**IATA** 

Packing group : III : 3 Labels

## 14.5 Environmental hazards

Environmentally hazardous no

Environmentally hazardous no

**IMDG** 

Marine pollutant no

14.6 Special precautions for user

Remarks Special Precautions: Refer to Section 7, Handling & Storage,

for special precautions which a user needs to be aware of or

needs to comply with in connection with transport.

# 14.7 Maritime transport in bulk according to IMO instruments

Pollution category Ship type

Product name : Propylene glycol methyl ether acetate

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**Additional Information**: This product may be transported under nitrogen blanketing.

Nitrogen is an odourless and invisible gas. Exposure to nitrogen may cause asphyxiation or death. Personnel must observe strict safety precautions when involved with a confined

space entry.

Transport in bulk according to Annex II of Marpol and the IBC

Code

### **SECTION 15: Regulatory information**

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

REACH - List of substances subject to authorisation : Product is not subject to Authorisation under REACH.

P5c

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

FLAMMABLE LIQUIDS

## Other regulations:

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Product is subject to Government Decree on the Monitoring of the Handling and Storage of Dangerous Chemicals 685/2015, based on Seveso III directive (2012/18/EU).

# The components of this product are reported in the following inventories:

AIIC : Listed

DSL : Listed

IECSC : Listed

ENCS : Listed

KECI : Listed

NZIoC : Listed

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PICCS : Listed

TSCA : Listed

TCSI : Listed

#### 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

### **SECTION 16: Other information**

#### Full text of other abbreviations

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

FI OEL : Finland. HTP Values - Concentrations Known to be Harmful

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit FI OEL / HTP values 15 min : Short term exposure limit : Short term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA

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- Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

**Further information** 

Training advice : Provide adequate information, instruction and training for op-

erators.

Other information : For Industry guidance and tools on REACH please visit the

CEFIC website at http://cefic.org/Industry-support.

The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not consid-

ered to be PBT or vPvB.

A vertical bar (|) in the left margin indicates an amendment

from the previous version.

Sources of key data used to compile the Safety Data

Sheet

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

Classification of the mixture: Classification procedure:

Flam. Liq. 3 H226 On basis of test data.

STOT SE 3 H336 Expert judgement and weight of evi-

dence determination.

Identified Uses according to the Use Descriptor System

**Uses - Worker** 

Title : Manufacture of substance- Industrial

**Uses - Worker** 

Title : Formulation & (re)packing of substances and mixtures- Indus-

trial

**Uses - Worker** 

Title : Uses in Coatings- Industrial

**Uses - Worker** 

Title : Uses in Coatings- Professional

**Uses - Worker** 

Title : Use in Cleaning Agents- Industrial

Uses - Worker

Title : Use in Cleaning Agents- Professional

**Uses - Worker** 

Title : Use in Agrochemicals uses- Professional

Identified Uses according to the Use Descriptor System

**Uses - Consumer** 

Title : Uses in Coatings

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- Consumer

**Uses - Consumer** 

Title : Use in Cleaning Agents

- Consumer

**Uses - Consumer** 

Title : Use in Agrochemicals uses

- Consumer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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**Exposure Scenario - Worker** 

30000000475	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Manufacture of substance- Industrial
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 15 Environmental Release Categories: ERC1, ERC4
Scope of process	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/ recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of		
	8 hours (unless stated differently).	
Other Operational Conditio	ns affecting Exposure	
Assumes activities are at am	bient temperature (unless stated differently).	
	ard of occupational hygiene is implemented.	
g .	, ,,,	
Contributing Scenarios	Risk Management Measures	
General expo-	No other specific measures identified.	
sures.Continuous pro-	·	
cess(closed sys-		
tems)PROC1		
General expo-	No other specific measures identified.	
sures.Continuous process-		
with sample collec-		
tion(closed sys-		
tems)PROC2		
Use in contained batch	No other specific measures identified.	
processesPROC3		
General exposures (open	No other specific measures identified.	
systems)PROC4		
Process sampling(closed	No other specific measures identified.	
systems)PROC3		
Equipment cleaning and	No other specific measures identified.	
maintenancePROC8a		
Bulk transfersDedicated	Clear transfer lines prior to de-coupling.	

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[ ( )			
facilityPROC8b			
Sulk product storage(closed No other specific measures identified. ystems)PROC2			
Laboratory activi- tiesPROC15	No other specific measures identified.		
Section 2.2			
Substance is a unique structu			
Readily biodegradable.			
Amounts Used			
Fraction of EU tonnage used	in ragion:	1	
Regional use tonnage (tonne		8,6E+04	
Fraction of Regional tonnage		0,00704	
		0.65.04	
Annual site tonnage (tonnes/		8,6E+04	
Maximum daily site tonnage		2,9E+05	
Frequency and Duration of	USE	_	
Continuous release.		000	
Emission Days (days/year):		300	
	nfluenced by risk management	T	
Local freshwater dilution factor		10	
Local marine water dilution fa		100	
	ns affecting Environmental Exposure		
	rocess (initial release prior to RMM):	2,7E-03	
Release fraction to wastewat RMM):	8,6E-08		
Release fraction to soil from	0		
	neasures at process level (source) to pr	event release	
Common practices vary acros	ss sites thus conservative process re-		
lease estimates used.			
Technical onsite conditions sions and releases to soil	s and measures to reduce or limit disch	arges, air emis-	
Risk from environmental expe	osure is driven by marine water.		
	lved substance to or recover from onsite		
wastewater.			
	wage treatment plant, no onsite		
wastewater treatment require			
	a typical removal efficiency of (%)	90	
Treat onsite wastewater (prior the required removal efficience	87,3		
If discharging to domestic ser wastewater treatment require	0		
	p prevent/limit release from site		
Do not apply industrial sludge			
Sludge should be incinerated			
Conditions and Measures r	elated to municipal sewage treatment p	lant	
	I from wastewater via domestic sewage	87,3	
treatment (%)	- 1-		
. ,	om wastewater after onsite and offsite	87,3	
(domestic treatment plant) RI		0.,0	
	2.000		
Assumed domestic sewage treatment plant flow (m3/d) 2.000  Conditions and Measures related to external treatment of waste for disposal			

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During manufacturing no waste of the substance is generated.

### Conditions and measures related to external recovery of waste

During manufacturing no waste of the substance is generated.

# SECTION 3 EXPOSURE ESTIMATION

#### Section 3.1 - Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

### **Section 3.2 - Environment**

Used ECETOC TRA model.

# SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 -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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).

According to EC No 1907/2006 as amended as at the date of this SDS

# **Methyl PROXITOL Acetate**

Version Revision Date: SDS Number: Date of last issue: 07.03.2023

3.2 24.11.2023 800001004875 Print Date 01.12.2023

**Exposure Scenario - Worker** 

Exposure Scenario - Worke	51
30000000476	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Formulation & (re)packing of substances and mixtures- Industrial
Use Descriptor	Sector of Use: SU3, SU10 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 8a, PROC 8b, PROC 9, PROC 14, PROC 15 Environmental Release Categories: ERC2
Scope of process	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tabletting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP	
Concentration of the Sub-	Covers use of substance/product up to 100% (unless stated	
stance in Mixture/Article	differently).,	
Frequency and Duration of	Use	
Covers daily exposures up to	8 hours (unless stated differently).	
Other Operational Condition	ns affecting Exposure	
Assumes activities are at amb	pient temperature (unless stated differently).	
Assumes a good basic standard of occupational hygiene is implemented.		
Contributing Scenarios	Risk Management Measures	
General expo-	No other specific measures identified.	
sures.Continuous process-		
with sample collec-		
tion(closed sys-		
tems)PROC1PROC2		
General exposures.Use in	No other specific measures identified.	
contained batch process-		
eswith sample collec-		
tionPROC3		
General exposures (open	No other specific measures identified.	
systems)PROC4		
Batch processes at elevat-	No other specific measures identified.	
ed temperatures(closed		
systems)PROC3		
Bulk transfersDedicated	No other specific measures identified.	
facilityPROC8b		
Mixing operations (open	Provide a good standard of general ventilation (not less than	

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ManualTransfer from/pouring from containersPROC8a  Equipment cleaning and maintenancePROC8a  Drum/batch transfersDedicated facilityPROC8b  Production or preparation or articles by tabletting, compression, extrusion or pelletisationPROC14  Drum and small package fillingDedicated facilityPROC9  Bulk product storage(closed systems)PROC2  Laboratory activitiesPROC15  Section 2.2  Control of Elutonnage used in region:  Readily biodegradable.  Amounts Used  Fraction of Regional tonnage used locally:  Annual site tonnage (tonnes/year):  Santon Days (days/year):  Local freshwater dilution factor:  Local freshwater dilution factor:  Local marine water dilution factor:  Common practices vary across sites thus conservative process release estimates used.  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical conditions and measures to reduce or limit discharges, air emission to provide a typical removal efficiency of (%)  Release fraction to provide a typical removal efficiency of (%)  Release fraction to provide a typical removal efficiency of (%)	ovetemo\DDOCE	2 to E air abangaa nar baur)	
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Regional use tonnage (tonnes/year):  Fraction of Regional tonnage used locally:  Annual site tonnage (tonnes/year):  Maximum daily site tonnage (kg/day):  Frequency and Duration of Use  Continuous release.  Emission Days (days/year):  Emission Days (days/year):  Local freshwater dilution factor:  Local marine water dilution factor:  Local marine water dilution factor:  Cother Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Fraction of Regional tonnage used locally:  Annual site tonnage (tonnes/year):  Annual site tonnage (tonnes/year):  Maximum daily site tonnage (kg/day):  Frequency and Duration of Use  Continuous release.  Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Annual site tonnage (tonnes/year):  Maximum daily site tonnage (kg/day):  Prequency and Duration of Use  Continuous release.  Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Maximum daily site tonnage (kg/day):  Frequency and Duration of Use  Continuous release.  Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  100  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			'
Frequency and Duration of Use  Continuous release.  Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  100  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Continuous release.  Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			2,3E+04
Emission Days (days/year):  Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		Use	
Environmental factors not influenced by risk management  Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			005
Local freshwater dilution factor:  Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		- Channel I have a later and a second	225
Local marine water dilution factor:  Other Operational Conditions affecting Environmental Exposure  Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			10
Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Release fraction to air from process (initial release prior to RMM):  Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			100
Release fraction to wastewater from process (initial release prior to RMM):  Release fraction to soil from process (initial release prior to RMM):  OE+00  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			0.000
Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
Release fraction to soil from process (initial release prior to RMM):  Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		er from process (initial release prior to	0E+00
Technical conditions and measures at process level (source) to prevent release  Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		process (initial release prior to PMM):	05.00
Common practices vary across sites thus conservative process release estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
lease estimates used.  Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			event release
Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil  Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		so sites thas conservative process re-	
Risk from environmental exposure is driven by soil.  Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		s and measures to reduce or limit disch	arges air emis-
Prevent discharge of undissolved substance to or recover from onsite wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.		dia medadies to reddee or innit disen	arges, an enns
wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.	Risk from environmental expo	osure is driven by soil.	
wastewater.  If discharging to domestic sewage treatment plant, no secondary wastewater treatment required.			
wastewater treatment required.			
	If discharging to domestic sev	wage treatment plant, no secondary	
Treat air emission to provide a typical removal efficiency of (%)			
	Treat air emission to provide	a typical removal efficiency of (%)	0

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Treat onsite wastewater (prior to receiving water discharge) to provide	87,3	
the required removal efficiency of >= (%)		
If discharging to domestic sewage treatment plant, no secondary	0	
wastewater treatment required.		
Organisational measures to prevent/limit release from site		
Do not apply industrial sludge to natural soils.		
Sludge should be incinerated, contained or reclaimed.		
Conditions and Measures related to municipal sewage treatment p	lant	
Estimated substance removal from wastewater via domestic sewage	87,3	
treatment (%)		
Total efficiency of removal from wastewater after onsite and offsite	87,3	
(domestic treatment plant) RMMs (%)		
Maximum allowable site tonnage (MSafe) based on release following	5,7E+06	
total wastewater treatment removal (kg/d)		
Assumed domestic sewage treatment plant flow (m3/d)	2.000	
Conditions and Measures related to external treatment of waste for disposal		
External treatment and disposal of waste should comply with applicable local and/or regional		
regulations.		
Conditions and measures related to external recovery of waste		
External recovery and recycling of waste should comply with applicable local and/or regional		
regulations.		
1		

SECTION 3	EXPOSURE ESTIMATION	
Section 3.1 - Health		
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise		

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 3.2 -Environment	
Used ECETOC TRA model.	

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO	
Section 4.1 - Health		
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management		
Measures/Operational Conditions outlined in Section 2 are implemented.		
Where other Risk Management Measures/Operational Conditions are adopted, then users		
should ensure that risks are managed to at least equivalent levels.		

# Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone

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or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).

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### **Exposure Scenario - Worker**

30000000477	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13, PROC 15 Environmental Release Categories: ERC4
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, flow, fluidised bed on production lines and film formation) and equipment cleaning, maintenance and associated laboratory activities.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP	
Concentration of the Substance in Mixture/Article	Covers use of substance/product up to 100% (unless stated differently).,	
Frequency and Duration of	Use	
Covers daily exposures up to 8 hours (unless stated differently).		

# Other Operational Conditions affecting Exposure

Assumes activities are at ambient temperature (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented.

Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Contributing Scenarios	Risk Management Measures
General exposures (closed systems) with sample collection PROC1 PROC2	No other specific measures identified.
Film formation - force dry- ing, stoving and other tech- nologies.PROC2	No other specific measures identified.
Mixing operations (closed systems)PROC3	No other specific measures identified.
Film formation - air dry-ingPROC4	No other specific measures identified.
Preparation of material for applicationMixing operations (open systems)PROC5	No other specific measures identified.

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Spraying (automat-	Carry out in a vented booth or extracted	enclosure.
ic/robotic)PROC7 SprayingManualPROC7	Carry out in a vented booth or extracted	onclosuro
Sprayingiviaridan 1007	Carry out in a vented booth or extracted enclosure. , or:	
	Wear a respirator conforming to EN140 v	vith Type A/P2 filter
	or better.	71 - 1
Material transfer-	No other specific measures identified.	
sPROC8aPROC8b		
Roller, spreader, flow appli-	No other specific measures identified.	
cationPROC10	No other enecific measures identified	
Dipping, immersion and pouringPROC13	No other specific measures identified.	
Laboratory activi-	No other specific measures identified.	
tiesPROC15	The other specific measures identified.	
Section 2.2	Control of Environmental Exposure	
Substance is a unique structu		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used	in region:	1
Regional use tonnage (tonne		5,3E+04
Fraction of Regional tonnage		0,25
Annual site tonnage (tonnes/		1,3E+04
Maximum daily site tonnage (		4,4E+04
Frequency and Duration of	Use	T
Continuous release.		000
Emission Days (days/year):		300
Environmental factors not influenced by risk management		
Local freshwater dilution factor:		10
Local marine water dilution factor: 100  Other Operational Conditions affecting Environmental Exposure		
Release fraction to air from process (initial release prior to RMM):		0,02
Release fraction to wastewater from process (initial release prior to		0E+00
RMM):		
Release fraction to soil from	process (initial release prior to RMM):	0E+00
	neasures at process level (source) to pro	event release
Common practices vary acros	ss sites thus conservative process re-	
lease estimates used.		<u> </u>
	s and measures to reduce or limit disch	arges, air emis-
sions and releases to soil	anna ia dalama kara di	-
Risk from environmental expo		
wastewater.	lved substance to or recover from onsite	
	wage treatment plant, no secondary	
wastewater treatment require		
Treat air emission to provide a typical removal efficiency of (%)		98
Treat onsite wastewater (prior to receiving water discharge) to provide		87,3
the required removal efficiency of >= (%)		,
If discharging to domestic sewage treatment plant, no secondary		0
wastewater treatment required.		
Organisational measures to prevent/limit release from site		

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Do not apply industrial sludge to natural soils.

Sludge should be incinerated, contained or reclaimed.

Conditions and Measures related to municipal sewage treatment plant			
Estimated substance removal from wastewater via domestic sewage	87,3		
treatment (%)			
Total efficiency of removal from wastewater after onsite and offsite	87,3		
(domestic treatment plant) RMMs (%)			
Maximum allowable site tonnage (MSafe) based on release following	4,2E+06		
total wastewater treatment removal (kg/d)			
Assumed domestic sewage treatment plant flow (m3/d)	2.000		

### Conditions and Measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or regional regulations.

### Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SE	CTION 3	EXPOSURE ESTIMATION

#### Section 3.1 - Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

#### **Section 3.2 - Environment**

Used ECETOC TRA model.

SECTION 4	<b>GUIDANCE TO CHECK COMPLIANCE WITH THE</b>
	EXPOSURE SCENARIO

### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).

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**Exposure Scenario - Worker** 

30000000478	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 5, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 13, PROC 15, PROC 19 Environmental Release Categories: ERC8a, ERC8d, ESVOC SpERC 8.3b.v1
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation), and equipment cleaning, maintenance and associated laboratory activities.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP	
Concentration of the Substance in Mixture/Article		
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions offseting Expenses		

Other Operational Conditions affecting Exposure

Assumes activities are at ambient temperature (unless stated differently).

Assumes a good basic standard of occupational hygiene is implemented.

Covers the percentage of the substance in the product up to 100 % (unless stated differently).

Contributing Scenarios	Risk	k Management Measures	
Filling/ preparation of equipme	ent	No other specific measures identified.	
from drums or containers.PRC	DC2		
General exposures (closed sy tems)Use in contained systemsPROC1PROC2	'S-	No other specific measures identified.	
Preparation of material for apprecationPROC3PROC5	oli-	No other specific measures identified.	
Film formation - air dryingPRC	DC4	No other specific measures identified.	
Material transfersDrum/batch transfersPROC8aPROC8b		No other specific measures identified.	
Roller, spreader, flow applicationPROC10	•	No other specific measures identified.	

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SprayingManualIndoorPROC11	Carry out in a vented booth or extra	cted enclosure.
SprayingManualOutdoorPROC11	Wear a respirator conforming to EN or better.	140 with Type A/P2 filter
Dipping, immersion and pouringPROC13	No other specific measures identified	ed.
Laboratory activitiesPROC15 No other specific measures identified		ed.
Hand application - fingerpaints, pastels, adhesivesPROC19	Wear suitable gloves tested to EN3	74.
	trol of Environmental Exposure	
Substance is a unique structure.		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used in reg		0,1
Regional use tonnage (tonnes/yea		5,3E+03
Fraction of Regional tonnage used	·	0,0005
Annual site tonnage (tonnes/year):		2,7
Maximum daily site tonnage (kg/da	y):	7,3
Frequency and Duration of Use		
Continuous release.		
Emission Days (days/year):		365
Environmental factors not influe	nced by risk management	
Local freshwater dilution factor:		10
Local marine water dilution factor:		100
Other Operational Conditions af		
Release fraction to air from process (initial release prior to RMM):		0,98
Release fraction to wastewater from process (initial release prior to RMM):  1,00E-02		
Release fraction to soil from proces		1,00E-02
	res at process level (source) to pr	event release
Common practices vary across site lease estimates used.		
Technical onsite conditions and sions and releases to soil	measures to reduce or limit disch	arges, air emis-
Risk from environmental exposure	is driven by marine water.	
Prevent discharge of undissolved s	substance to or recover from onsite	
wastewater.		
If discharging to domestic sewage treatment plant, no secondary		
wastewater treatment required.		
Treat air emission to provide a typical removal efficiency of (%)		0
Treat onsite wastewater (prior to receiving water discharge) to provide		87,3
the required removal efficiency of >= (%)		
If discharging to domestic sewage treatment plant, no secondary		0
wastewater treatment required.		
Organisational measures to prev		
Do not apply industrial sludge to not Sludge should be incinerated, cont		
Conditions and Measures related	d to municipal sewage treatment p	lant

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Estimated substance removal from wastewater via domestic sewage treatment (%)	87,3
Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)	87,3
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Assumed domestic sewage treatment plant flow (m3/d)  Conditions and Measures related to external treatment of waste for	

### Conditions and Measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or regional regulations.

#### Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SECTION 3	EXPOSURE ESTIMATION	
Section 3.1 - Health		
The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.		

#### **Section 3.2 - Environment**

Used ECETOC TRA model.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Section 4.1 - Health	

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

### **Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet (http://cefic.org/en/reach-for-industries-libraries.html).

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**Exposure Scenario - Worker** 

30000000479	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 7, PROC 8a, PROC 8b, PROC 10, PROC 13 Environmental Release Categories: ERC4, ESVOC SpERC 4.4a.v1
Scope of process	Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP
Concentration of the Substance in Mixture/Article	Covers use of substance/product up to 100% (unless stated differently).,
Frequency and Duration of	Use
Covers daily exposures up to	8 hours (unless stated differently).
Other Operational Condition	ns affecting Exposure
Assumes activities are at amb	pient temperature (unless stated differently).
Assumes a good basic standa	ard of occupational hygiene is implemented.
Contributing Scenarios	Risk Management Measures
Bulk transfersPROC8a	No other specific measures identified.
Use in contained system- sAutomated process with (semi) closed sys- tems.PROC1PROC2	No other specific measures identified.
Drum/batch transfer- sPROC3	No other specific measures identified.
Filling/ preparation of equipment from drums or containers.Dedicated facilityPROC8b	No other specific measures identified.
Use in contained batch processesTreatment by heatingPROC4	No other specific measures identified.

Degreasing small objects in No other specific measures identified.

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cleaning stationPROC13		
Cleaning with low-pressure	No other specific measures identified.	
washersPROC10	No other specific measures identified.	
Cleaning with high pressure	Provide a good standard of general venti	lation (not loss than
washersPROC7	3 to 5 air changes per hour).	iation (not less than
washersi NOO1	Avoid carrying out activities involving exp	ocure for more than
	4 hours	osure for more than
	Wear suitable gloves tested to EN374.	
	vical suitable gloves tested to Elver 4.	
CleaningSurfacesno spray-	No other specific measures identified.	
ingManualPROC10	•	
Section 2.2	Control of Environmental Exposure	
Substance is a unique structu	ire.	
Readily biodegradable.		
Amounts Used		•
Fraction of EU tonnage used	in region:	1
Regional use tonnage (tonnes		8.415
Fraction of Regional tonnage		0,0005
Annual site tonnage (tonnes/y		4,2
Maximum daily site tonnage (		210
Frequency and Duration of		
Continuous release.		
Emission Days (days/year):		20
Environmental factors not i	nfluenced by risk management	
Local freshwater dilution factor	or:	10
Local marine water dilution fa	ctor:	100
Other Operational Condition	ns affecting Environmental Exposure	
Release fraction to air from p	rocess (initial release prior to RMM):	3,0E-01
Release fraction to wastewate	er from process (initial release prior to	1,0E-04
RMM):		
	process (initial release prior to RMM):	0E+00
	easures at process level (source) to pro	event release
	ss sites thus conservative process re-	
lease estimates used.		
	and measures to reduce or limit discha	arges, air emis-
sions and releases to soil		1
	osure is driven by marine water.	
•	ved substance to or recover from onsite	
wastewater.		
	vage treatment plant, no secondary	
wastewater treatment require		0
	a typical removal efficiency of (%)	0
· ·	r to receiving water discharge) to provide	87,3
the required removal efficience	vage treatment plant, no secondary	0
wastewater treatment require		١
	o prevent/limit release from site	
Do not apply industrial sludge		
Sludge should be incinerated		
Claage official be intellerated	, somanios of robininos.	
Conditions and Measures re	elated to municipal sewage treatment p	lant
Conditions and Measures I	to mamorpar och age treatment p	

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Estimated substance removal from wastewater via domestic sewage	87,3
treatment (%)	,
treatment (78)	
Total efficiency of removal from wastewater after onsite and offsite	87,3
(domestic treatment plant) RMMs (%)	
Maximum allowable site tonnage (MSafe) based on release following	4,4E+05
total wastewater treatment removal (kg/d)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
One PC and an IMage and a lateral transfer of the attention of the state of the sta	1

#### Conditions and Measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or regional regulations.

#### Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SECTION 3	EXPOSURE ESTIMATION
Section 3.1 - Health	
The ECETOC TRA tool h	has been used to estimate workplace exposures unless otherwise
indicated.	

#### **Section 3.2 - Environment**

Used ECETOC TRA model.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Coetion 4.4 Hoolth	

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### **Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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**Exposure Scenario - Worker** 

Exposure coeriano Worke	•
30000000480	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 13 Environmental Release Categories: ERC8a, ERC8d, ESVOC SpERC 8.4b.v1
Scope of process	Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMEN MEASURES
Section 2.1	Control of Worker Exposure
<b>Product Characteristics</b>	
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP
Concentration of the Sub-	Covers use of substance/product up to 100% (unless state
stance in Mixture/Article	differently).,
Frequency and Duration of	Use
Covers daily exposures up to	8 hours (unless stated differently).
<b>Other Operational Conditio</b>	ns affecting Exposure
	bient temperature (unless stated differently).
Assumes a good basic stand	ard of occupational hygiene is implemented.
Contributing Scenarios	Risk Management Measures
Filling/ preparation of equipm	·
from drums or contain-	The early opening measured identified.
ers.Dedicated facili-	
tvPROC3PROC8h	

tyPROC3PROC8b Use in contained systemsAuto-No other specific measures identified. mated process with (semi) closed systems.PROC1PROC2 Semi Automated process. (e.g.: No other specific measures identified. Semi automatic application of floor care and maintenance products)PROC4 Filling/ preparation of equipment Ensure operation is undertaken outdoors. from drums or containers. Nondedicated facilityOutdoorPROC8a ManualCleaningSurfacesDipping, No other specific measures identified. immersion and pouringPROC13

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Cleaning with low-pressure washersPROC10	No other specific measures identific	ed.
Cleaning with high pressure	Provide a good standard of genera	I or controlled ventilation
washersIndoorPROC11	(5 to 15 air changes per hour).	. or controlled vertilation
macricionido de la reconstrucción de la reconstrucc	Wear suitable gloves tested to EN3	374.
	Trodi dalladio giovos tostos to 2110	
Cleaning with high pressure	Limit the substance content in the p	oroduct to 25 %.
washersOutdoorPROC11	, or:	
	Avoid carrying out activities involving	ng exposure for more than
	4 hours	
	Ensure operation is undertaken out	
	Wear suitable gloves tested to EN3	374.
Ad hoc manual application via	No other specific measures identific	ed.
trigger sprays, dipping,	·	
etc.Rolling, BrushingPROC10	1	
Cleaning of medical devic-	No other specific measures identific	ed.
esPROC4		
Section 2.2	Control of Environmental Exposure	_
Substance is a unique structu	re.	
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used i		0,1
Regional use tonnage (tonnes		842
Fraction of Regional tonnage		0,005
Annual site tonnage (tonnes/y	rear):	4,2
Maximum daily site tonnage (		11,5
Frequency and Duration of	Use	
Continuous release.		
Emission Days (days/year):		365
	nfluenced by risk management	
Local freshwater dilution factor		10
Local marine water dilution fac		100
	ns affecting Environmental Exposure	
	ocess (initial release prior to RMM):	0,02
	er from process (initial release prior to	1,00E-06
RMM):	reases (initial release prior to DMM).	05.00
	process (initial release prior to RMM):	0E+00
	easures at process level (source) to process sites thus conservative process re-	event release
lease estimates used.	s sites thus conservative process re-	
	and measures to reduce or limit disch	parges air emis-
sions and releases to soil	and incasures to reduce of mint discin	larges, an emis-
Risk from environmental expo	sure is driven by soil.	
Prevent discharge of undissol	ved substance to or recover from onsite	
wastewater.		
	vage treatment plant, no secondary	
wastewater treatment required		
	a typical removal efficiency of (%)	0
	to receiving water discharge) to provide	87,3
the required removal efficienc	y ot >= (%)	

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If discharging to domestic sewage treatment plant, no secondary	0
wastewater treatment required.	
Organisational measures to prevent/limit release from site	
Do not apply industrial sludge to natural soils.	
Sludge should be incinerated, contained or reclaimed.	
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	87,3
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	87,3
(domestic treatment plant) RMMs (%)	
Maximum allowable site tonnage (MSafe) based on release following	187
total wastewater treatment removal (kg/d)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Conditions and Measures related to external treatment of waste fo	r disposal
External treatment and disposal of waste should comply with applicable	local and/or regional
regulations.	_
Conditions and measures related to external recovery of waste	
External recovery and recycling of waste should comply with applicable	local and/or regional
regulations.	

SECTION 3	EXPOSURE ESTIMATION
Section 3.1 - Health	
	peen used to estimate workplace exposures unless otherwise
indicated	

indicated.

•

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO	
Section 4.1 - Health		
Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management		
Measures/Operational Conditions outlined in Section 2 are implemented.		
Where other Disk Management Managers (Operational Conditions are adopted then years		

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

Further details on scaling and control technologies are provided in SpERC factsheet

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(http://cefic.org/en/reach-for-industries-libraries.html).

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### **Exposure Scenario - Worker**

30000000483	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Agrochemicals uses- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 4, PROC 8a, PROC 8b, PROC 11, PROC 13 Environmental Release Categories: ERC8a, ERC8d
Scope of process	Use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging; including equipment clean-downs and disposal.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Worker Exposure	
Product Characteristics	Control of Worker Exposure	
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP	
Concentration of the Substance in Mixture/Article	Limit the substance content in the mixture to 50 %.,	
Frequency and Duration of	Use	
	8 hours (unless stated differently).	
<b>Other Operational Conditio</b>		
	bient temperature (unless stated differently). ard of occupational hygiene is implemented.	
Contributing Scenarios	Risk Management Measures	
General exposures (closed systems)PROC1	No other specific measures identified.	
Transfer from/pouring from containersDedicated facilityPROC8b	No other specific measures identified.	
Mixing operations (open systems)OutdoorPROC4	No other specific measures identified.	
Spraying/ fogging by man-	Ensure operation is undertaken outdoors.	
ual applicationOut- doorPROC11	Wear suitable gloves tested to EN374.	
Spraying/ fogging by machine applicationPROC11	Carry out in a vented booth or extracted enclosure.	
Ad hoc manual application via trigger sprays, dipping, etc.PROC13	No other specific measures identified.	
Equipment cleaning and maintenancePROC8a	No other specific measures identified.	
Disposal of wastesOut- doorPROC8a	Ensure operation is undertaken outdoors.	
Storage.OutdoorPROC2	No other specific measures identified.	

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Section 2.2	Control of Environmental Exposure	
Substance is a unique structu		
Readily biodegradable.		
Amounts Used		
	in region:	0,1
Fraction of EU tonnage used in region:		66
Regional use tonnage (tonnes/year):  Fraction of Regional tonnage used locally:		1
Annual site tonnage (tonnes/		66
Maximum daily site tonnage (		180
Frequency and Duration of		100
Continuous release.	<u> </u>	
Emission Days (days/year):		365
	nfluenced by risk management	303
Local freshwater dilution factor		10
Local freshwater dilution factors  Local marine water dilution fa		100
		100
	ns affecting Environmental Exposure	1
	rocess (initial release prior to RMM):	0E+00
Release fraction to wastewate RMM):	er from process (initial release prior to	0E+00
	process (initial release prior to RMM):	0E+00
	neasures at process level (source) to pr	
	ss sites thus conservative process re-	
lease estimates used.	ss siles thus conservative process re-	
	and measures to reduce or limit disch	argos air omis-
sions and releases to soil	and measures to reduce or minit discin	larges, all ellis-
	osure is driven by marine water.	
	lved substance to or recover from onsite	
wastewater.	ived substance to or recover from onsite	
	vage treatment plant, no secondary	
wastewater treatment require		
	a typical removal efficiency of (%)	0
	r to receiving water discharge) to provide	87,3
the required removal efficience		0.,0
	vage treatment plant, no secondary	0
wastewater treatment require		
	prevent/limit release from site	
Do not apply industrial sludge		
Sludge should be incinerated		
3		
Conditions and Measures re	elated to municipal sewage treatment p	lant
Estimated substance remova	I from wastewater via domestic sewage	87,3
treatment (%)	•	
	m wastewater after onsite and offsite	87,3
(domestic treatment plant) RN		
	age (MSafe) based on release following	104
total wastewater treatment re	moval (kg/d)	
		2.000
Assumed domestic sewage ti	eatment plant now (mo/u)	2.000
	elated to external treatment of waste fo	

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#### Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

#### SECTION 3 EXPOSURE ESTIMATION

#### Section 3.1 - Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

#### **Section 3.2 - Environment**

Used ECETOC TRA model.

# SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 -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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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**Exposure Scenario - Consumer** 

30000001049	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC9a, PC18 Environmental Release Categories: ERC8a, ERC8d, ESVOC SpERC 8.3c.v1
Scope of process	Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES		
Section 2.1	Control of Consumer Exposure		
Product Characteristics			
Physical form of product	Liquid, vapour pressure > 10 Pa		
Concentration of the Substance in Mixture/Article	Covers concentration up to (%): 45 %		
Amounts Used			
for each use event, covers a	mount up to (g):	1.000	
Frequency and Duration of			
Exposure (hours/event):		2,2	
covers use up to (times/day	of use):	1	
Other Operational Condition	ons affecting Exposure		
Covers use at ambient tempor	eratures.		
Covers use in room size of 2	0m3		
Covers use under typical hou	Covers use under typical household ventilation.		
Product Categories OPERATIONAL CONDITIONS AND RISK MANAGEMEN MEASURES		SK MANAGEMENT	
Coatings and paints, thin- ners, paint removers Sol- vent rich, high solid, water borne paint.	ers Sol-		
	Avoid using at a product concentration g	reater than 10 %	
	For each use event, avoid using a produthan 1.000 g	ct amount greater	
	For each use, avoid using for more than	2,2 hours/event	
	Avoid using in room with closed doors.		
	Avoid using when windows closed.		
Ink and toners Inks and toners.	Covers concentrations up to 45 %		

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For each use event, covers amount up to 40 g
Covers exposure up to 0,5 hours/event
Covers use up to 1 times/day of use
covers use up to 365 day/year

Section 2.2 Control of Environmental Exposure		
Substance is a unique structure.		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used	in region:	0,1
Regional use tonnage (tonnes	s/year):	528
Fraction of Regional tonnage	used locally:	0,0005
Annual site tonnage (tonnes/)	/ear):	0,264
Maximum daily site tonnage (	kg/day):	0,723
Frequency and Duration of	Use	
Continuous release.		
Emission Days (days/year):		365
	nfluenced by risk management	
Local freshwater dilution factor	or:	10
Local marine water dilution factor:		100
Other Operational Conditions affecting Environmental Exposure		
	rocess (initial release prior to RMM):	0,99
Release fraction to wastewate RMM):	er from process (initial release prior to	0,01
Release fraction to soil from p	process (initial release prior to RMM):	0,005
Conditions and Measures related to municipal sewage treatment plant		
Estimated substance removal from wastewater via domestic sewage treatment (%)		87,3
Total efficiency of removal from wastewater after onsite and offsite (domestic treatment plant) RMMs (%)		87,3
Assumed domestic sewage treatment plant flow (m3/d) 2.000		
Conditions and Measures related to external treatment of waste for disposal		r disposal
External treatment and disposal of waste should comply with applicable local and/or region-		

External treatment and disposal of waste should comply with applicable local and/or regional regulations.

## Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SECTION 3	EXPOSURE ESTIMATION
Section 3.1 - Health	

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated.

The Consexpo model has been used to estimate consumer exposures unless otherwise indicated.

Section 3.2 - Environment
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Used ECETOC TRA model.

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SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
	EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### **Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

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**Exposure Scenario - Consumer** 

Exposure Scenario - Consumer	
30000001050	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC35 Environmental Release Categories: ERC8a, ERC8d, ESVOC SpERC 8.3c.v1
Scope of process	Covers general exposures to consumers arising from the use of household products sold as washing and cleaning products, aerosols, coatings, de-icers, lubricants and air care products.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Consumer Exposure	
Product Characteristics	-	
Physical form of product	Liquid, vapour pressure > 10	Pa
Concentration of the Substance in Mixture/Article	Covers concentration up to (%): 10 %	
Amounts Used		
for each use event, covers	amount up to (g):	16
Frequency and Duration of	of Use	·
Covers use up to (days/year):		365
covers use up to (times/day of use):		3
Exposure (hours/event):		1
Other Operational Conditi	ons affecting Exposure	·
Covers use in room size of	15 m3	
Covers use at ambient temp	peratures.	
Covers use under typical ho	busehold ventilation.	
Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Washing and cleaning products (including solvent	No specific risk management measure identified beyond those operational conditions stated.	

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cleaners).	

Section 2.2	Section 2.2 Control of Environmental Exposure	
Substance is a unique structure.		
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used	in region:	0,1
Regional use tonnage (tonnes	s/year):	16,8
Fraction of Regional tonnage	used locally:	0,0005
Annual site tonnage (tonnes/	year):	8,4E-03
Maximum daily site tonnage (	kg/day):	2,3E-02
Frequency and Duration of	Use	
Continuous release.		
Emission Days (days/year):		365
Environmental factors not i	nfluenced by risk management	
Local freshwater dilution factor:		10
Local marine water dilution factor:		100
	ns affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM): 0,95		0,95
Release fraction to wastewater from process (initial release prior to		0,025
RMM):		
Release fraction to soil from process (initial release prior to RMM):		0,025
Conditions and Measures related to municipal sewage treatment plant		
Estimated substance removal from wastewater via domestic sewage		87,3
treatment (%)		
Total efficiency of removal from wastewater after onsite and offsite		87,3
(domestic treatment plant) RMMs (%)		
Maximum allowable site tonnage (MSafe) based on release following		104
total wastewater treatment removal (kg/d)		
111 11 11 11 11 11 11 11 11 11 11 11 11		2.000
Conditions and Measures related to external treatment of waste for disposal		

Conditions and Measures related to external treatment of waste for disposal

External treatment and disposal of waste should comply with applicable local and/or regional regulations.

## Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SECTION 3	EXPOSURE ESTIMATION
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#### Section 3.1 - Health

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated.

The Consexpo model has been used to estimate consumer exposures unless otherwise indicated.

#### Section 3.2 - Environment

Used ECETOC TRA model.

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SECTION 4	<b>GUIDANCE TO CHECK COMPLIANCE WITH THE</b>
	EXPOSURE SCENARIO

#### Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### **Section 4.2 - 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.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.

According to EC No 1907/2006 as amended as at the date of this SDS

# **Methyl PROXITOL Acetate**

Version Revision Date: SDS Number: Date of last issue: 07.03.2023

3.2 24.11.2023 800001004875 Print Date 01.12.2023

**Exposure Scenario - Consumer** 

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SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Agrochemicals uses - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC27 Environmental Release Categories: ERC8a, ERC8d
Scope of process	Covers the consumer use in agrochemicals in liquid and solid forms.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Section 2.1	Control of Consumer Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure > 10 Pa	
Concentration of the Substance in Mixture/Article	Covers concentration up to (%): 70 %	
Amounts Used		
for each use event, covers amount up to (g):  137		137
Frequency and Duration of	Use	
covers use up to (times/day	of use):	1
Covers use up to (days/year):		365
Exposure (hours/event): 0,1		0,1
Other Operational Conditions affecting Exposure		
Covers use in room size of 2	0m3	
Covers use under typical hou	usehold ventilation.	
Covers use at ambient temperatures.		
Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Plant protection products Sprays.	No specific risk management measure identified beyond those operational conditions stated.	

Section 2.2	Control of Environmental Exp	oosure
Substance is a unique structu	re.	
Readily biodegradable.		
Amounts Used		
Fraction of EU tonnage used in region: 0,1		0,1
Regional use tonnage (tonnes/year):		66
Fraction of Regional tonnage used locally:		1
Annual site tonnage (tonnes/year): 66		66
Maximum daily site tonnage (kg/day): 180		180
Frequency and Duration of Use		

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Continuous release.	
Emission Days (days/year):	365
Environmental factors not influenced by risk management	
Local freshwater dilution factor:	10
Local marine water dilution factor:	100
Other Operational Conditions affecting Environmental Exposure	
Release fraction to air from process (initial release prior to RMM):	1
Release fraction to wastewater from process (initial release prior to	0E+00
RMM):	
Release fraction to soil from process (initial release prior to RMM):	0E+00
Conditions and Measures related to municipal sewage treatment p	lant
Estimated substance removal from wastewater via domestic sewage	87,3
treatment (%)	
Total efficiency of removal from wastewater after onsite and offsite	87,3
(domestic treatment plant) RMMs (%)	
Maximum allowable site tonnage (MSafe) based on release following	110
total wastewater treatment removal (kg/d)	
Assumed domestic sewage treatment plant flow (m3/d)	2.000
Conditions and Measures related to external treatment of waste for disposal	
External treatment and disposal of waste should comply with applicable	local and/or region-

al regulations.

#### Conditions and measures related to external recovery of waste

External recovery and recycling of waste should comply with applicable local and/or regional regulations.

SECTION 3	EXPOSURE ESTIMATION
Section 2.1 Health	

The ECETOC TRA tool has been used to estimate consumer exposures unless otherwise indicated.

The Consexpo model has been used to estimate consumer exposures unless otherwise indicated.

### Section 3.2 - Environment

Used ECETOC TRA model.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Section 4.1 - Health	

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

#### Section 4.2 -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

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#### measures.

Required removal efficiency for wastewater can be achieved using onsite/offsite technologies, either alone or in combination.

Required removal efficiency for air can be achieved using on-site technologies, either alone or in combination.