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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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

1.1 Product identifier

Trade name : IPA Pharma Product code : S1156

Registration number EU : 01-2119457558-25-0001, 01-2119457558-25-0002

Synonyms : 2-propanol, Dimethyl carbinol, IPA-Pharma*, IPSC, Isopropa-

nol

CAS-No. : 67-63-0

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)

(In non-emergency situations, the number of the Poison Information Centre is 08-33 12 31)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2 H225: Highly flammable liquid and vapour.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Specific target organ toxicity - single exposure, Category 3, Inhalation, Narcotic

H336: May cause drowsiness or dizziness.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

effects

, Oral

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :





Signal word : Danger

Hazard statements : PHYSICAL HAZARDS:

H225 Highly flammable liquid and vapour.

HEALTH HAZARDS:

H319 Causes serious eye irritation.

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. P243 Take action to prevent static discharges.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

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

keep comfortable for breathing.

Storage:

No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

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.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Components

Chemical name	CAS-No.	Concentration (% w/w)
	EC-No.	
Isopropyl alcohol	67-63-0	100
	200-661-7	

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.

ii persistent irritation occurs, obtain medical attention.

In case of eye contact : Immediately flush eye(s) with plenty of water.

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

rinsing.

Transport to the nearest medical facility for additional treat-

ment.

If swallowed : If swallowed, do not induce vomiting: transport to nearest

medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facili-

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

ty: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

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.

No specific hazards under normal use conditions.

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.

If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest

congestion, shortness of breath, and/or fever.

If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : IMMEDIATE TREATMENT IS EXTREMELY IMPORTANT!

Call a doctor or poison control center for guidance.

Potential for chemical pneumonitis.

Treat symptomatically.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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.

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 bond-

ing 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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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 appropriate 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.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form	Control parameters	Basis
		of exposure)		
Isopropyl alcohol	67-63-0	NGV	150 ppm	SE AFS
			350 mg/m3	
Isopropyl alcohol		KGV	250 ppm	SE AFS
			600 mg/m3	
	Further information: Indicative short term limit value shall be used as a rec-			
	ommended maximum value and should not be exceeded			

Biological occupational exposure limits

8.2 Exposure controls

Engineering measures

Read in conjunction with the Exposure Scenario for your specific use contained in the Annex. Use sealed systems as far as possible.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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:

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.

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 : Wear goggles for use against liquids and gas.

Wear full face shield if splashes are likely to occur.

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. Incidental contact/Splash protection: PVC or neoprene 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

Respiratory protection

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

IPA Pharma

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2023

 1.2
 18.08.2023
 800001034234
 Print Date 26.08.2023

care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Skin and body protection : Wear antistatic and flame-retardant clothing, if a local risk

assessment deems it so.

Skin protection is not required under normal conditions of

use.

For prolonged or repeated exposures use impervious clothing

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.

Protective clothing approved to EU Standard EN14605.

If engineering controls do not maintain airborne concentrations 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 : characteristic

Melting point/freezing point : Data not available

Boiling point/boiling range : 82 - 83 °C

Flammability

Flammability (solid, gas) : Not applicable

Lower explosion limit and upper explosion limit / flammability limit

Upper explosion limit / upper flammability limit

Data not available

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

IPA Pharma

SDS Number: Date of last issue: 06.04.2023 Version Revision Date:

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Lower explosion limit /

Lower flammability limit

Data not available

12 °C Flash point

Method: IP 170

Decomposition temperature

Decomposition tempera-

ture

Data not available

pΗ Not applicable

Viscosity

Viscosity, dynamic Data not available

Viscosity, kinematic Data not available

Solubility(ies)

Water solubility Data not available

: 0,78 - 0,79 (20 °C) Relative density

Method: ASTM D4052

Density 785 - 786 kg/m3 (20 °C)

Method: ASTM D4052

Relative vapour density : 2 (20 °C)

9.2 Other information

Explosives Not applicable

Not applicable Oxidizing properties

Surface tension Data not available

Molecular weight Data not available

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.

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

IPA Pharma

Date of last issue: 06.04.2023 Version Revision Date: SDS Number:

18.08.2023 800001034234 Print Date 26.08.2023 1.2

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

exposure

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

skin or eye contact, and accidental ingestion.

Acute toxicity

Components:

Isopropyl alcohol:

Acute oral toxicity LD50 (Rat): > 5000 mg/kg

Remarks: Low toxicity

Acute inhalation toxicity (Rat): Exposure time: 6 h

Method: Test(s) equivalent or similar to OECD Test Guideline

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcot-

ic effects.

Remarks: Low toxicity by inhalation.

Acute dermal toxicity LD50 (Rabbit): > 5000 mg/kg

Remarks: Low toxicity

Skin corrosion/irritation

Components:

Isopropyl alcohol:

Remarks Not irritating to skin.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Serious eye damage/eye irritation

Components:

Isopropyl alcohol:

Species : Rabbit Exposure time : 24 h

Method : Test(s) equivalent or similar to OECD Test Guideline 405

Remarks : Causes serious eye irritation.

Species : Rabbit Exposure time : 48 h

Method : Test(s) equivalent or similar to OECD Test Guideline 405

Remarks : Causes serious eye irritation.

Species : Rabbit Exposure time : 72 h

Method : Test(s) equivalent or similar to OECD Test Guideline 405

Remarks : Causes serious eye irritation.

Respiratory or skin sensitisation

Components:

Isopropyl alcohol:

Remarks : Not a sensitiser.

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

Germ cell mutagenicity

Components:

Isopropyl alcohol:

Genotoxicity in vitro : Remarks: Based on available data, the classification criteria

are not met.

Genotoxicity in vivo : Remarks: Not mutagenic.

Germ cell mutagenicity- As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

Carcinogenicity

Components:

Isopropyl alcohol:

Remarks : Not a carcinogen.

Carcinogenicity - Assess-

ment

This product does not meet the criteria for classification in

categories 1A/1B.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Material	GHS/CLP Carcinogenicity Classification
Isopropyl alcohol	No carcinogenicity classification.

Material	Other Carcinogenicity Classification
Isopropyl alcohol	IARC: Group 3: Not classifiable as to its carcinogenicity to humans

Reproductive toxicity

Components:

Isopropyl alcohol:

Effects on fertility

Remarks: Does not impair fertility., Not a developmental toxicant., Based on available data, the classification criteria are

not met.

Reproductive toxicity - As-

sessment

This product does not meet the criteria for classification in

categories 1A/1B.

STOT - single exposure

Components:

Isopropyl alcohol:

Remarks : May cause drowsiness and dizziness.

STOT - repeated exposure

Components:

Isopropyl alcohol:

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

sidered relevant to humans

Aspiration toxicity

Components:

Isopropyl alcohol:

Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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:

Isopropyl alcohol:

Remarks : Exposure may enhance the toxicity of other materials.

Classifications by other authorities under varying regulatory

frameworks may exist.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Isopropyl alcohol:

Toxicity to fish : Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants : Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to microorganisms

Remarks: Practically non toxic:

LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic tox-

icity)

Remarks: Data not available

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

Remarks: Data not available

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

12.2 Persistence and degradability

Components:

Isopropyl alcohol:

Biodegradability : Remarks: Readily biodegradable.

Oxidises rapidly by photo-chemical reactions in air.

12.3 Bioaccumulative potential

Components:

Isopropyl alcohol:

Bioaccumulation : Remarks: Does not bioaccumulate significantly.

12.4 Mobility in soil

Components:

Isopropyl alcohol:

Mobility : Remarks: Dissolves in water., If the product enters soil, one or

more constituents will or may be mobile and may contaminate

groundwater.

12.5 Results of PBT and vPvB assessment

Components:

Isopropyl alcohol:

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).

Components:

Isopropyl alcohol:

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

IPA Pharma

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 06.04.2023

 1.2
 18.08.2023
 800001034234
 Print Date 26.08.2023

Additional ecological infor-

mation

: Does not have ozone depletion potential.

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 methods in compliance with applicable regulations.

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

ourses.

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 national requirements and must be complied with.

MARPOL - see International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) which provides technical aspects at controlling pollutions from ships.

Disposal, transport, storage and handling should be in accordance with SE regulation Avfallsförordning (2011:927).

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.

Packing: Emptying: Place the package upside down, and tilt slightly, circa 10 degrees, to enable drainage in such a way that the lowest part of the package is at the exit orifice. On some packing an extra hole must be made. Drainage should be carried out at room temperature (at least 15 °C). Wait until the package is drip dry. Do not close package after draining. Please note the risks connected with emptying package and containers with flammable liquids. Emptied package should be ventilated in a safe place away from sparks and fire. Residues may be an explosion risk. Do not puncture, cut or weld in noncleaned package, containers or drums.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Local legislation

Remarks : Suggestion for emptied package:

15 01 02: Plastic packaging 15 01 04 metallic packaging.

Packages containing any remaining product and which have not been emptied until drip dry, must be handled as dangerous

waste and must be well sealed before disposal.

Suggestion for waste code:

15 01 10: Packaging containing residues of or contaminated

by dangerous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADR : 1219
RID : 1219
IMDG : 1219
IATA : 1219

14.2 UN proper shipping name

ADR : ISOPROPANOL RID : ISOPROPANOL IMDG : ISOPROPANOL

IATA : ISOPROPANOL

14.3 Transport hazard class(es)

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

14.4 Packing group

ADR

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

RID

Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IMDG

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

: 3

Packing group : II Labels : 3

Packing group : II

14.5 Environmental hazards

ADR

Labels

Environmentally hazardous : no

rid

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 : Not applicable
Ship type : Not applicable
Product name : Not applicable

SECTION 15: Regulatory information

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

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

P5c FLAMMABLE LIQUIDS

Other regulations:

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

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

SE AFS : Sweden. Occupational Exposure Limit Values

SE AFS / NGV : Time Weighted Average SE AFS / KGV : 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 - 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

The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Sheet Health Services, material suppliers' data, CONCAWE, EU

IUCLID date base, EC 1272 regulation, etc).

Classification of the mixture: Classification procedure:

Flam. Liq. 2 H225 On basis of test data.

Eye Irrit. 2 H319 Expert judgement and weight of evi-

dence determination.

STOT SE 3 H336 Expert judgement and weight of evi-

dence determination.

Identified Uses according to the Use Descriptor System

Uses - Worker

Title : Water treatment chemicals- Professional

Uses - Worker

Title : Water treatment chemicals- Industrial

Uses - Worker

Title : Use in laboratories- Professional

Uses - Worker

Title : Use in laboratories- Industrial

Uses - Worker

Title : De-icing and anti-icing applications- Professional

Uses - Worker

Title : Functional Fluids- Professional

Uses - Worker

Title : Functional Fluids- Industrial

Uses - Worker

Title : Use as a fuel- Professional

Uses - Worker

Title : Use as a fuel- Industrial

Uses - Worker

Title : Use in Agrochemicals uses- Professional

Uses - Worker

Title : Use as binders and release agents- Professional

Uses - Worker

Title : Use as binders and release agents- Industrial

Uses - Worker

Title : Metal working fluids / rolling oils- Professional

Uses - Worker

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Title : Metal working fluids / rolling oils- Industrial

Uses - Worker

Title : Lubricants- Professional

Uses - Worker

Title : Lubricants- Industrial

Uses - Worker

Title : Use in Cleaning Agents- Professional

Uses - Worker

Title : Use in Cleaning Agents- Industrial

Uses - Worker

Title : Uses in Coatings- Professional

Uses - Worker

Title : Uses in Coatings- Industrial

Uses - Worker

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

trial

Uses - Worker

Title : Distribution of substance- Industrial

Uses - Worker

Title : Use as an intermediate- Industrial

Uses - Worker

Title : Manufacture of substance- Industrial

Identified Uses according to the Use Descriptor System

Uses - Consumer

Title : Uses in Coatings

- Consumer

Uses - Consumer

Title : Use in Cleaning Agents

- Consumer

Uses - Consumer

Title : Lubricants

- Consumer

Uses - Consumer

Title : Use in Agrochemicals uses

- Consumer

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Uses - Consumer

Title : Use as a fuel

- Consumer

Uses - Consumer

Title : Functional Fluids

- Consumer

Uses - Consumer

Title : De-icing and anti-icing applications

- Consumer

Uses - Consumer

Title : Other Consumer Uses

- Consumer

Uses - Consumer

Title : Water treatment chemicals

- 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.

SE / EN

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure oceriario - W	OTRE!
30000000313	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Water treatment chemicals- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC1, PROC3, PROC4, PROC8a, PROC8b, PROC13 Environmental Release Categories: ERC8f
Scope of process	Covers the use of the substance for the treatment of water in open and closed systems.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP
Concentration of the Substance in Mixture/Article Frequency and Duration o	Covers percentage substance in the product up to 100%., Unless stated otherwise.,
	o 8 hours (unless stated differently).
Other Operational Condition	
	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfersDedicated facilityPROC8b	Clear transfer lines prior to de-coupling.
Drum/batch transfer- sPROC8b	Use drum pumps or carefully pour from container.
General exposures (closed systems)Use in contained batch processesPROC3	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
ManualPouring from small containersPROC13	Carefully pour from containers.
Equipment cleaning and maintenancePROC8a	Retain drain downs in sealed storage pending disposal or for subsequent recycle.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Storage.PROC1	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure occinano - Worker	
30000000312	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Water treatment chemicals- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC13 Environmental Release Categories: ERC3, ERC4
Scope of process	Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP
Concentration of the Substance in Mixture/Article Frequency and Duration or	Covers percentage substance in the product up to 100%., Unless stated otherwise.,
	o 8 hours (unless stated differently).
Other Operational Condition	
	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfers(closed systems)PROC2	Clear transfer lines prior to de-coupling.
Drum/batch transfersDedicated facilityPROC8b	Use drum pumps or carefully pour from container.
General exposures (closed systems)Use in contained batch processesPROC3	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
ManualPouring from small containersPROC13	Carefully pour from containers.
Equipment cleaning and maintenancePROC8a	Retain drain downs in sealed storage pending disposal or for subsequent recycle.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Storage.PROC1	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure obeniano Worker	
30000000311	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in laboratories- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC10, PROC15 Environmental Release Categories: ERC8a
Scope of process	Use of small quantities within laboratory settings, including material transfers and equipment cleaning.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to	o 8 hours (unless stated differently).	
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Laboratory activitiesPROC15	No other specific measures identified.
CleaningPROC10	No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure occitatio 111	o no
30000000310	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in laboratories- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC10, PROC15 Environmental Release Categories: ERC2, ERC4
Scope of process	Use of the substance within laboratory settings, including material transfers and equipment cleaning.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100%., Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Laboratory activitiesPROC15	No other specific measures identified.
CleaningPROC10	No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure Scenario - WC	of Kei
30000000306	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	De-icing and anti-icing applications- Professional
Use Descriptor	Sector of Use: SU22
-	Process Categories: PROC1, PROC2, PROC8a, PROC8b,
	PROC11
	Environmental Release Categories: ERC8d
Scope of process	Ice prevention and de-icing of vehicles, aircraft and other
• •	equipment by spraying.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP
Concentration of the Substance in Mixture/Article Frequency and Duration or	Covers percentage substance in the product up to 100%., Unless stated otherwise.,
	o 8 hours (unless stated differently).
Other Operational Condition	
	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfersDedicated facilityPROC8b	Clear transfer lines prior to de-coupling.
Drum/batch transfer- sPROC8b	No other specific measures identified.
Spraying/ fogging by machine applicationPROC11	Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. Stay upwind/ keep distance from source.
Ad hoc manual application via trigger sprays, dipping, etc.PROC11	Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. Stay upwind/ keep distance from source.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Equipment cleaning and maintenancePROC8a	No other specific measures identified.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

300000000305	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Functional Fluids- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC3, PROC8a, PROC9, PROC20 Environmental Release Categories: ERC9a, ERC9b
Scope of process	Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in professional equipment including maintenance and related material transfers.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at	STP
Concentration of the Sub-	Covers percentage substance in the pro-	oduct up to 100%.,
stance in Mixture/Article	Unless stated otherwise.,	•
Frequency and Duration o	f Use	
Covers daily exposures up t	o 8 hours (unless stated differently).	
Other Operational Condition	,	1
Assumes use at not more th	an 20°C above ambient temperature (unle	ess stated differently).
	dard of occupational hygiene is implement	

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Drum/batch transfersPROC8a	No other specific measures identified.
Transfer from/pouring from co- tainersPROC9	n- No other specific measures identified.
ManualFilling of arti- cles/equipmentPROC9	Carefully pour from containers.
Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants.PROC20	No other specific measures identified.
General exposures (closed systems)PROC1PROC2PRO	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Remanufacture of reject articlesPROC9	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Section 4.1 - Health	
Dradiated expecures are not expected to exceed the DN/M/EL when the Disk Management	

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

No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker

Exposure ocertailo - Worker		
30000000303		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Functional Fluids- Industrial	
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC4, PROC8a, PROC9, PROC8b Environmental Release Categories: ERC7	
Scope of process	Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product Liquid, vapour pressure 0.5 - 10 kPa at STP		
Concentration of the Substance in Mixture/Article	- man a man production of the contract of the	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfers(closed systems)PROC1PROC2	Clear transfer lines prior to de-coupling.
Drum/batch transfersDedicated facilityPROC8b	No other specific measures identified.
Filling of arti- cles/equipmentUse of closed filling equip- ment.PROC9	No other specific measures identified.
ManualFilling of arti- cles/equipmentPROC8a	Carefully pour from containers.
Use of sealed items containing functional fluids e.g.	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

transfer oils, hydraulic flu- ids, refrigerants.PROC2	
General exposures (open systems)PROC4	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2 Control of Environmental Exposure		
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

SECTION 4 GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO		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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure oceriano - Worl	NOT
30000000302	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use as a fuel- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16 Environmental Release Categories: ERC9a, ERC9b
Scope of process	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to	o 8 hours (unless stated differently).	
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios R	isk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfersDedicated facili- tyPROC8b	Transfer via enclosed lines. Clear transfer lines prior to de-coupling.
Drum/batch transfersDedicated facilityPROC8b	Avoid spillage when withdrawing pump.
Refueling.Dedicated facili- tyPROC8b	Avoid spillage when withdrawing pump.
Use as a fuel(closed systems)PROC16	No other specific measures identified.
General exposures (closed systems)PROC1PROC2PROC3	No other specific measures identified.
Equipment cleaning and	Retain drain downs in sealed storage pending disposal or for

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

maintenancePROC8a	subsequent recycle.
Storage.PROC1	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 -Environment No exposure assessment presented for the environment.

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	

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
No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

30000000301	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use as a fuel- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC8a, PROC8b, PROC16 Environmental Release Categories: ERC7
Scope of process	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to	o 8 hours (unless stated differently).	
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfersDedicated facili- tyPROC8b	Transfer via enclosed lines. Clear transfer lines prior to de-coupling.
Drum/batch transfersDedicated facilityPROC8b	Use drum pumps or carefully pour from container.
General exposures (closed systems)PROC1PROC2PROC	No other specific measures identified.
Use as a fuel(closed systems)PROC16	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Drain down system prior to equipment opening or maintenance. Retain drain downs in sealed storage pending disposal or for

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

	subsequent recycle.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

LAPOSUIE OCEITATIO - WOINEI	
300000000300	
0000000	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Agrochemicals uses- Professional
Use Descriptor	Sector of Use: SU22
-	Process Categories: PROC1, PROC2, PROC4, PROC8a,
	PROC8b, PROC11, PROC13
	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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,
stance in Mixture/Article	Unless stated otherwise.,
Frequency and Duration o	f Use
Covers daily exposures up to	o 8 hours (unless stated differently).
Other Operational Condition	ons affecting Exposure
	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Transfer from/pouring from containersPROC8b	No other specific measures identified.
Mixing operations (open systems)PROC4	No other specific measures identified.
Spraying/ fogging by manual applicationPROC11	Limit the substance content in the product to 25 %. Avoid carrying out activities involving exposure for more than 4 hours
Spraying/ fogging by machine applicationPROC11	Apply within a vented cab supplied with filtered air under positive pressure and with a protection factor of >20.
Ad hoc manual application	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

via trigger sprays, dipping, etc.PROC13	
Equipment cleaning and maintenancePROC8a	Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker		
30000000299		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Use as binders and release agents- Professional	
Use Descriptor	Sector of Use: SU22 Process Categories: PROC 1, PROC 2, PROC 3, PROC 4, PROC 6, PROC 8a, PROC 8b, PROC 10, PROC 11, PROC 14 Environmental Release Categories: ERC8a, ERC8d	
Scope of process	Covers the use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure		
Product Characteristics			
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP		
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100%., Unless stated otherwise.,		
Frequency and Duration of Use			
Covers daily exposures up to 8 hours (unless stated differently).			
Other Operational Conditions affecting Exposure			
	an 20°C above ambient temperature (unles dard of occupational hygiene is implemente		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfers(closed systems)PROC1PROC2PROC3	No other specific measures identified.
Drum/batch transfer- sPROC8aPROC8b	No other specific measures identified.
Mixing operations (open systems)PROC4	No other specific measures identified.
Mixing operations (closed systems)PROC3	No other specific measures identified.
Mold formingPROC14	No other specific measures identified.
Casting operations(open sys-	Provide extraction ventilation at points where emissions oc-

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

tems)elevated temperature- PROC6	cur.
MachineSprayingPROC11	Carry out in a vented booth or extracted enclosure. Segregate the activity away from other operations.
Roller, spreader, flow applicationPROC10	No other specific measures identified.
ManualSprayingPROC11	Carry out in a vented booth or extracted enclosure. , or: Wear a respirator conforming to EN140 with Type A/P2 filter or better. Segregate the activity away from other operations.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker		
30000000298		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Use as binders and release agents- Industrial	
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC6, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC14 Environmental Release Categories: ERC4	
Scope of process	Covers the use as binders and release agents including material transfers, mixing, application (including spraying and brushing), mould forming and casting, and handling of waste.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure		
Product Characteristics			
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP		
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100%., Unless stated otherwise.,		
Frequency and Duration of Use			
Covers daily exposures up to 8 hours (unless stated differently).			
Other Operational Conditions affecting Exposure			
	an 20°C above ambient temperature (unles dard of occupational hygiene is implemente		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfers(closed systems)PROC1PROC2PROC3	Clear transfer lines prior to de-coupling.
Drum/batch transfer- sPROC8aPROC8b	No other specific measures identified.
Mixing operations (closed systems)PROC3	No other specific measures identified.
Mixing operations (open systems)PROC4	No other specific measures identified.
Mold formingPROC14	No other specific measures identified.
Casting operations(open sys-	Provide extraction ventilation at points where emissions oc-

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

tems)elevated temperature- PROC6	cur.
Treatment by dipping and pour-ingPROC13	No other specific measures identified.
Spraying (automatic/robotic)PROC7	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.
SprayingManualPROC7	Carry out in a vented booth or extracted enclosure.
Equipment cleaning and maintenancePROC8a	No other specific measures identified.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worke	Exposure Scenario - Worker	
30000000297		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Metal working fluids / rolling oils- Professional	
Use Descriptor	Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC3, PROC5, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17 Environmental Release Categories: ERC8a, ERC8d	
Scope of process	Covers the use in formulated MWFs including transfer operations, open and contained cutting/machining activities, automated and manual application of corrosion protections, draining and working on contaminated/ reject articles, and disposal of waste oils.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100%., Unless stated otherwise.,
Frequency and Duration of	Use
Covers daily exposures up to	o 8 hours (unless stated differently).
Other Operational Condition	ons affecting Exposure
	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.

Contributing Scenarios	Risk Managem	nent Measures	
General measures (eye irritar	nts).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.	
General exposures (closed sy tems)PROC1PROC2PROC3	/S-	No other specific measures identified.	
Bulk transfersDedicated facili	yPROC8b	Clear transfer lines prior to de-coupling.	
Filling/ preparation of equipm or contain- ers.PROC5PROC8aPROC8b		No other specific measures identified.	
Product sampling.PROC8b		No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Metal machining operationsPROC17	Provide extraction ventilation at points where emissions occur.
Roller, spreader, flow applicationPROC10	No other specific measures identified.
SprayingPROC11	Carry out in a vented booth or extracted enclosure. , or: Wear a respirator conforming to EN140 with Type A/P2 filter or better.
Treatment by dipping and pouringPROC13	Allow time for product to drain from workpiece. No other specific measures identified.
Equipment cleaning and maintenance-PROC8aPROC8b	Retain drain downs in sealed storage pending disposal or for subsequent recycle. No other specific measures identified.
Storage.PROC1PROC2	Handle substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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

Section 4.2 -Environment	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

300000000296	J. No.
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Metal working fluids / rolling oils- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17 Environmental Release Categories: ERC4
Scope of process	Covers the use in formulated MWFs/rolling oils including transfer operations, rolling and annealing activities, cutting/machining activities, automated and manual application of corrosion protections (including brushing, dipping and spraying), equipment maintenance, draining and disposal of waste oils.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently).		
Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risl	k Management Measures	
General measures (eye irritar	nts).	Use suitable eye protection. Avoid direct eye contact with product, also via contaminati on hands.	on
General exposures (closed sy tems)PROC1PROC2PROC3		No other specific measures identified.	
General exposures (open sys tems)PROC4	-	No other specific measures identified.	
Bulk transfersDrum/batch tranfersPROC5PROC8bPROC9	าร-	No other specific measures identified.	
Product sampling.PROC8b		No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

18.08.2023 800001034234 Print Date 26.08.2023 1.2

	T
Metal machining opera-	No other specific measures identified.
tionsPROC17	
Treatment by dipping and pour-	No other specific measures identified.
ingPROC13	·
SprayingPROC7	Minimise exposure by partial enclosure of the operation or
. , ,	equipment and provide extract ventilation at openings.
	c dark man and browner armana community and all all and all and all and all all and all all and all all and all all all and all all and all all all all and all all all all all all all all all al
Manual applications e.g. brush-	No other specific measures identified.
ing, rollingPROC10	'
Automated metal roll-	No other specific measures identified.
ing/formingelevated tempera-	·
tureUse in contained sys-	
temsPROC2	
Semi-automated metal roll-	Automate activity where possible.
ing/formingelevated tempera-	No other specific measures identified.
turePROC17	The strict openine measures facilities.
Equipment cleaning and mainte-	Retain drain downs in sealed storage pending disposal or for
nancePROC8aPROC8b	subsequent recycle.
Halleet Recoal Recob	Subsequent recycle.
Storage.PROC1PROC2	Store substance within a closed system.
	,

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE
	EXPOSURE SCENARIO
Section 4.1 - Health	
Due diete die management and automorphism to a consent the DN/M/EL where the Diel. Management	

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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker	
30000000295	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Lubricants- Professional
Use Descriptor	Sector of Use: SU22 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC10, PROC11, PROC13, PROC17, PROC18, PROC20 Environmental Release Categories: ERC8a, ERC8d, ERC9a, ERC9b
Scope of process	Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of engines and similar articles, reworking on reject articles, equipment maintenance and disposal of waste oil.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at ST	Р
Concentration of the Substance in Mixture/Article	Covers percentage substance in the produ Unless stated otherwise.,	ct up to 100%.,
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Condition	ons affecting Exposure	
	an 20°C above ambient temperature (unless lard of occupational hygiene is implemented.	

Contributing Scenarios	Risk M	anagement Measures	
General measures (eye irritants).		Use suitable eye protection. Avoid direct eye contact with product, also via contamin tion on hands.	na-
General exposures (closed systems)PROC1PROC2PROC3		No other specific measures identified.	
Operation of equipment containing engine oils and similar.PROC20		No other specific measures identified.	
General exposures (open systems)PROC4	-	No other specific measures identified.	
Bulk transfersDedicated facilityPROC8b	-	No other specific measures identified.	
Filling/ preparation of equipment		No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

from drums or contain- ers.PROC8aPROC8b	
Operation and lubrication of high energy open equipmentIn-doorPROC17PROC18	Restrict area of openings to equipment. Provide extraction ventilation at points where emissions occur.
Operation and lubrication of high energy open equipmentOut-doorPROC17PROC18	No other specific measures identified.
Maintenance and machine set upelevated temperaturePROC8b	Provide extract ventilation to emission points when contact with warm (>50 Degrees C) lubricant is likely.
Maintenance of small itemselevated temperatureCovers percentage substance in the product up to 5%.PROC8a	Avoid carrying out activities involving exposure for more than 4 hours Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Engine lubricant servicePROC9	No other specific measures identified.
Manual applications e.g. brushing, rollingPROC10	No other specific measures identified.
SprayingPROC11	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. , or: Wear a respirator conforming to EN140 with Type A/P2 filter or better.
Treatment by dipping and pour- ingPROC13	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. , or: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Allow time for product to drain from workpiece.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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	
No exposure assessment presented for the environment.	

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE
	EXPOSURE SCENARIO

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

30000000294	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Lubricants- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC17, PROC18 Environmental Release Categories: ERC7, ERC4
Scope of process	Covers the use of formulated lubricants in closed and open systems including transfer operations, operation of machinery/engines and similar articles, reworking on reject articles, equipment maintenance and disposal of wastes.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of Use		
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Conditions affecting Exposure		
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios R	isk Management Measures
General measures (eye irri-	Use suitable eye protection. Avoid direct eye contact with product, also via contamination
tants).	on hands.
General exposures (closed systems)PROC1PROC2PROC3	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
Bulk transfersDedicated facili- tyPROC8b	Clear transfer lines prior to de-coupling.
Filling/ preparation of equipment from drums or contain-	No other specific measures identified.
ers.PROC8aPROC8b	
Initial factory fill of equip-	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

mentPROC9	
Operation and lubrication of	Provide extraction ventilation at points where emissions oc-
high energy open equip-	cur.
mentPROC17PROC18	Restrict area of openings to equipment.
Manual applications e.g. brushing, rollingPROC10	No other specific measures identified.
Treatment by dipping and pour-ingPROC13	No other specific measures identified.
SprayingPROC7	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings.
Maintenance (of larger plant items) and machine set up-PROC8b	No other specific measures identified.
Maintenance of small itemsPROC8a	No other specific measures identified.
Storage.PROC1PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

SECTION 4	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.	
NAM	

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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure ocenano - Worker	
3000000278	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Professional
Use Descriptor	Sector of Use: SU22
	Process Categories: PROC1, PROC2, PROC3, PROC4,
	PROC8a, PROC8b, PROC10, PROC11, PROC13
	Environmental Release Categories: ERC8a, ERC8d
	-
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 MANAGEMENT MEASURES	
Additional Information	No exposure assessment presented for the environment.	

Section 2.1	Control of Worker Exposure		
Product Characteristics			
Physical form of product	sical form of product Liquid, vapour pressure 0.5 - 10 kPa at STP		
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,		
stance in Mixture/Article	Unless stated otherwise.,		
Frequency and Duration of Use			
Covers daily exposures up to 8 hours (unless stated differently).			
Other Operational Conditions affecting Exposure			
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.			

Contributing Scenarios	Risk Manage	ment Measures	
General measures (eye irritar	nts).	Use suitable eye protection. Avoid direct eye contact with product, also via cotamination on hands.	on-
Filling/ preparation of equipm drums or containers.PROC8b		No other specific measures identified.	
Automated process with (sem systems.Use in contained systemsPROC2PROC3		No other specific measures identified.	
Semi Automated process. (e. tomatic application of floor ca maintenance products)PROC	re and	No other specific measures identified.	
Filling/ preparation of equipm drums or containers.PROC8a		No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

ManualSurfacesCleaningDipping, immersion and pouringPROC13	No other specific measures identified.
Cleaning with low-pressure washers- Rolling, Brushingno sprayingPROC10	No other specific measures identified.
Cleaning with high pressure washers- SprayingIndoorPROC11	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
Cleaning with high pressure washers- SprayingOutdoorPROC11	Limit the substance content in the product to 1 %., or: Avoid carrying out activities involving exposure for more than 15 minutes.
ManualSurfacesCleaningSprayingPROC10	No other specific measures identified.
Ad hoc manual application via trigger sprays, dipping, etc.Rolling, BrushingPROC10	No other specific measures identified.
Application of cleaning products in closed systemsOutdoorPROC4	No other specific measures identified.
Cleaning of medical devicesPROC4	No other specific measures identified.
Storage.PROC1	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

30000000277	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Cleaning Agents- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b, PROC10, PROC13 Environmental Release Categories: ERC4
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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product unless stated otherwise.,	ıp to 100%.,
Frequency and Duration of	f Use	
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Condition	ons affecting Exposure	
	an 20°C above ambient temperature (unless sta dard of occupational hygiene is implemented.	ted differently).

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
Bulk transfersPROC8a	Clear transfer lines prior to de-coupling.
Automated process with (semi) closed systems. Use in contained systemsPROC2	No other specific measures identified.
Application of cleaning products in closed systemsPROC2	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Filling/ preparation of equipment from drums or containers.PROC8b	No other specific measures identified.
Use in contained batch processesPROC4	No other specific measures identified.
Degreasing small objects in cleaning stationPROC13	No other specific measures identified.
Cleaning with low-pressure washersPROC10	No other specific measures identified.
Cleaning with high pressure washersPROC7	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
ManualSurfacesCleaningno sprayingPROC10	No other specific measures identified.
Storage.PROC1	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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.	

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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - worker	
30000000276	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Professional
Use Descriptor	Sector of Use: SU22
	Process Categories: PROC1, PROC2, PROC3, PROC4,
	PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13,
	PROC15, PROC19
	Environmental Release Categories: ERC8a, ERC8d
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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of	Use	
Covers daily exposures up to	8 hours (unless stated differently).	
Other Operational Condition	ons affecting Exposure	
Assumes use at not more the	an 20°C above ambient temperature (unless stated differentle	y).
	lard of occupational hygiene is implemented.	•

Contributing Scenarios	Risk	Management Measures	
General measures (eye irritan	its).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination hands.	on
General exposures (closed sy tems)PROC1PROC2PROC3	/S-	No other specific measures identified.	
Filling/ preparation of equipme from drums or containers.Use contained systemsPROC2		No other specific measures identified.	
General exposures (open systems)PROC4	-	No other specific measures identified.	
Preparation of material for app	pli-	No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

anticul la dia containe al batab	T
cationUse in contained batch processesPROC3	
•	No other accessing accessing identified
Film formation - air dry-	No other specific measures identified.
ingOutdoorPROC4	
Film formation - air dryingIn-	No other specific measures identified.
doorPROC4	
Preparation of material for appli-	No other specific measures identified.
cationIndoorPROC5	·
Material transfersDrum/batch	No other specific measures identified.
transfersPROC8aPROC8b	'
Roller, spreader, flow applica-	No other specific measures identified.
tionPROC10	The state of sealing measures resolution
ManualSprayingIndoorPROC11	Carry out in a vented booth or extracted enclosure.
mandaropraying macon recorr	Carry car in a verneu sceni er extracted encicearer
ManualSprayingOutdoorPROC11	Wear a respirator conforming to EN140 with Type A filter or
gg	better.
	Selleri
Dipping, immersion and pour-	No other specific measures identified.
ingPROC13	
Laboratory activitiesPROC15	No other specific measures identified.
	The state of series in education in definition.
Hand application - fingerpaints,	No other specific measures identified.
pastels, adhesivesPROC19	·

Section 2.2	Control of Environmental Exposure	
No exposure assessment pre	sented for the environment.	

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

indicated.

Section 3.2 -Environment No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Section 4.1 - Health	
Measures/Operational Cond Where other Risk Managem	expected to exceed the DN(M)EL when the Risk Management itions outlined in Section 2 are implemented. ent Measures/Operational Conditions are adopted, then users managed to at least equivalent levels.

Section 4.2 -Environment	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worke	·I
30000000275	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings- Industrial
Use Descriptor	Sector of Use: SU3 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15 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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of	Use	
Covers daily exposures up to	8 hours (unless stated differently).	
Other Operational Condition	ons affecting Exposure	
Assumes use at not more the	an 20°C above ambient temperature (unless stated differentle	y).
	lard of occupational hygiene is implemented.	•

Contributing Scenarios	Risk N	Management Measures	
General measures (eye irrital	nts).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.	na-
General exposures (closed s tems)PROC1PROC2	ys-	No other specific measures identified.	
General exposures (open systems)PROC4	S-	No other specific measures identified.	
Film formation - force drying, ing and other technologies.U contained systemsPROC2		No other specific measures identified.	
Mixing operations (closed sys	S-	No other specific measures identified.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

tems)General exposures (closed systems)PROC3	
Film formation - air dryingPROC4	No other specific measures identified.
Preparation of material for applicationMixing operations (open systems)PROC5	No other specific measures identified.
Spraying (automatic/robotic)PROC7	Carry out in a vented booth or extracted enclosure.
ManualSprayingPROC7	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
Roller, spreader, flow applicationPROC10	No other specific measures identified.
Dipping, immersion and pouringPROC13	No other specific measures identified.
Laboratory activitiesPROC15	No other specific measures identified.
Material transfersDrum/batch transfersTransfer from/pouring from containersPROC8aPROC8bPROC9	No other specific measures identified.
Production or preparation or articles by tabletting, compression, extrusion or pelletisationPROC14	No other specific measures identified.

Section 2.2	Control of Environmental Exposure	
No exposure assessment pre	sented for the environment.	

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

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker	
30000000274	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Formulation & (re)packing of substances and mixtures- Industrial
Use Descriptor	Sector of Use: SU3, SU10 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC5, PROC8a, PROC8b, PROC9, PROC14, PROC15 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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure			
Product Characteristics				
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP			
Concentration of the Substance in Mixture/Article	Covers percentage substance in the product up to 100%., Unless stated otherwise.,			
Frequency and Duration of Use				
Covers daily exposures up to 8 hours (unless stated differently).				
Other Operational Conditions affecting Exposure				
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.				

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination on hands.
General exposures (closed systems)PROC1PROC2PROC	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
Batch processes at elevated temperaturesPROC3	No other specific measures identified.
Process samplingPROC3	No other specific measures identified.
Laboratory activitiesPROC15	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Bulk transfersPROC8b	No other specific measures identified.
Mixing operations (open systems)PROC5	No other specific measures identified.
ManualTransfer from/pouring from containersPROC8a	No other specific measures identified.
Drum/batch transfersPROC8b	No other specific measures identified.
Production or preparation or articles by tabletting, compres- sion, extrusion or pelletisa- tionPROC14	No other specific measures identified.
Drum and small package fill-ingPROC9	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Drain down system prior to equipment opening or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment pre	esented for the environment.	

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

No exposure assessment presented for the environment.

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	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure oceriano - Worke	
30000000273	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Distribution of substance- Industrial
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC9, PROC15 Environmental Release Categories: ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC7
Scope of process	Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration of	f Use	
Covers daily exposures up to	o 8 hours (unless stated differently).	
Other Operational Condition	ons affecting Exposure	
Assumes use at not more th	an 20°C above ambient temperature (unless stated differently). dard of occupational hygiene is implemented.	

Contributing Scenarios R	isk Management Measures
General measures (eye irri-	Use suitable eye protection.
tants).	Avoid direct eye contact with product, also via contamination on hands.
General exposures (closed systems)PROC1PROC2PROC3	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
Process samplingPROC3	No other specific measures identified.
Laboratory activitiesPROC15	No other specific measures identified.
Bulk transfers(open systems)PROC8b	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Bulk transfers(closed systems)PROC8b	No other specific measures identified.
Drum and small package fill-ingPROC9	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Drain down system prior to equipment opening or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

EXPOSURE SCENA	CK COMPLIANCE WITH THE RIO
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
No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Worker	
30000000272	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use as an intermediate- Industrial
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15 Environmental Release Categories: ERC6a
Scope of process	Use of substance as an intermediate (not related to Strictly Controlled Conditions). Includes recycling/ recovery, material transfers, storage, sampling, associated laboratory activities, maintenance and loading (including marine vessel/barge, road/rail car and bulk container).

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration o	f Use	
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Condition	ons affecting Exposure	
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irritants).	Use suitable eye protection. Avoid direct eye contact with product, also via contamination
tants).	on hands.
General exposures (closed systems)PROC1PROC2PROC	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
Process samplingPROC8a	No other specific measures identified.
Laboratory activitiesPROC15	No other specific measures identified.
Bulk transfers(open systems)PROC8b	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Bulk transfers(closed systems)PROC8b	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Drain down system prior to equipment opening or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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 No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

30000000271		
00000000271		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Manufacture of substance- Industrial	
Use Descriptor	Sector of Use: SU3, SU8, SU9 Process Categories: PROC1, PROC2, PROC3, PROC4, PROC8a, PROC8b, PROC15 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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Worker Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure 0.5 - 10 kPa at STP	
Concentration of the Sub-	Covers percentage substance in the product up to 100%.,	
stance in Mixture/Article	Unless stated otherwise.,	
Frequency and Duration o	f Use	
Covers daily exposures up to 8 hours (unless stated differently).		
Other Operational Condition	ons affecting Exposure	
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented.		

Contributing Scenarios	Risk Management Measures
General measures (eye irri-	Use suitable eye protection. Avoid direct eye contact with product, also via contamination
tants).	on hands.
General exposures (closed systems)PROC1PROC2PROC	No other specific measures identified.
General exposures (open systems)PROC4	No other specific measures identified.
Process samplingPROC8b	No other specific measures identified.
Laboratory activitiesPROC15	No other specific measures identified.
Bulk transfers(open systems)PROC8b	No other specific measures identified.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Bulk transfers(closed systems)PROC8b	No other specific measures identified.
Equipment cleaning and maintenancePROC8a	Drain down system prior to equipment opening or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle.
Storage.PROC2	Store substance within a closed system.

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure Scenario - Consumer	
30000001013	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Uses in Coatings - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC1, PC4, PC8 (excipient only), PC9a, PC9b, PC9c, PC15, PC18, PC23, PC24, PC31, PC34 Environmental Release Categories: ERC8a, ERC8d
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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Consumer Exposure			
Product Characteristics				
Physical form of product	Liquid, vapour pressure > 10 Pa at STP			
Concentration of the Substance in Mixture/Article	Unless stated otherwise.			
	Covers concentration up to (%): 100 %			
Amounts Used				
Unless stated otherwise.				
for each use event, covers amount up to (g):		13.800		
covers skin contact area (cm2):		857,5		
Frequency and Duration of	Use			
Unless stated otherwise.				
covers use up to (times/day of use):		1		
Exposure (hours/event):		6		
Other Operational Conditions affecting Exposure				
Unless stated otherwise.				

Covers use at ambient temperatures.

Covers use in room size of 20m3

Covers use under typical household ventilation.

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Adhesives, sealants Glues, hobby use.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	For each use event severe amount up to 0 a
	For each use event, covers amount up to 9 g
	Covers use in room size of 20 m3
A.II	for each use event Covers exposure up to 4 hours/event
Adhesives, sealants Glues DIY-use (carpet glue, tile glue, wood parquet glue).	Covers concentrations up to 50 %
	covers use up to 1 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 110,00 cm2
	For each use event, covers amount up to 6.390 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 6,00 hours/event
Adhesives, sealants Glue from spray.	Covers concentrations up to 50 %
	covers use up to 6 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2
	For each use event, covers amount up to 85,05 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 4,00 hours/event
Adhesives, sealants Sealants.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2
	For each use event, covers amount up to 75 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 1,00 hours/event
Anti-Freeze and de-icing products Washing car window.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	For each use event, covers amount up to 0,5 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,02 hours/event
Anti-Freeze and de-icing products Pouring into radiator.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,00 cm2
	For each use event, covers amount up to 2.000 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,17 hours/event
Anti-Freeze and de-icing	Covers concentrations up to 50 %
1 10020 and ac long	1 22.2.2 20.100.111.41.01.0 up to 00 /0

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	1
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 214,40 cm2
	For each use event, covers amount up to 4 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,25 hours/event
Biocidal products (e.g. Dis- infectants, pest control) (excipient only). Laundry and dish washing products.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	Covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	For each use event, covers amount up to 15 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,50 hours/event
Biocidal products (e.g. Dis- infectants, pest control) (excipient only). Cleaners, liquids (all purpose clean- ers, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners).	Covers concentrations up to 50 %
,	covers use up to 128 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	For each use event, covers amount up to 27 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,33 hours/event
Biocidal products (e.g. Dis- infectants, pest control) (excipient only). Cleaners, trigger sprays (all purpose cleaners,sanitary products, glass cleaners).	Covers concentrations up to 50 %
	covers use up to 128 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,00 cm2
	For each use event, covers amount up to 35 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,17 hours/event
Coatings and paints, thin-	Covers concentrations up to 27,5 %
ners, paint removers Solvent rich, high solid, water borne paint.	
vent rich, high solid, water	covers use up to 6 day/year
vent rich, high solid, water	covers use up to 6 day/year covers use up to 1 times/day of use

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	For each use event, covers amount up to 744 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 2,20 hours/event
Coatings and paints, thin-	Covers concentrations up to 50 %
ners, paint removers Aerosol spray can.	Covers concentrations up to 50 %
	covers use up to 2 day/year
	covers use up to 1 times/day of use
	For each use event, covers amount up to 215 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,33 hours/event
Coatings and paints, thin- ners, paint removers Re- movers (paint-, glue-, wall paper-, sealant-remover).	Covers concentrations up to 50 %
1 - 1 - 1 - 1 - 1	covers use up to 3 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	for each use event, covers amount up to (g): 491 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 2,00 hours/event
Fillers, Putties Fillers and	Covers concentrations up to 50 %
putty.	Covers concentiations up to 30 %
patty.	covers use up to 12 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2
	For each use event, covers amount up to 85 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 4,00 hours/event
Fillers, Putties Plasters and floor equalizers.	Covers concentrations up to 2 %
	covers use up to 12 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	For each use event, covers amount up to 13.800 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 2,00 hours/event
Fillers, Putties Modelling clay.	Covers concentrations up to 10 %
,	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 254,40 cm2
	For each use event, assumes swallowed amount of 1 g
	Covers use in room size of 20 m3
Finger paints	Covers concentrations up to 15 %
i ingoi painto	covers use up to 365 day/year
	covers use up to 11 times/day of use
	covers skin contact area up to (cm2): 254,40 cm2
	For each use event, assumes swallowed amount of 1,35 g

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	Covers use in room size of 20 m3	
Non-metal-surface treat-	Covers concentrations up to 27,5 %	
ment products Solvent rich,	Obvers concentrations up to 21,5 %	
high solid, water borne		
paint.		
	covers use up to 6 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,75 cm2	
	For each use event, covers amount up to 744 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,20 hours/event	
Non-metal-surface treat-	Covers concentrations up to 50 %	
ment products Aerosol	OOVERS CONCENTIATIONS UP to 30 /0	
spray can.		
opray cam	covers use up to 2 day/year	
	covers use up to 1 times/day of use	
	For each use event, covers amount up to 215 g	
	Covers use in a one car garage (34 m3) under typical ventila-	
	tion.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,33 hours/event	
Non-metal-surface treat-	Covers concentrations up to 50 %	
ment products Removers	Covers concentrations up to 60 %	
(paint-, glue-, wall paper-,		
sealant-remover).		
esalam remevely.	covers use up to 3 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 857,50 cm2	
	For each use event, covers amount up to 491 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,00 hours/event	
Ink and toners Inks and	Covers concentrations up to 50 %	
toners.	Covers constitutions up to co /c	
	covers use up to 365 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 71,40 cm2	
	For each use event, covers amount up to 40 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,20 hours/event	
Leather tanning, dye, finish-	Covers concentrations up to 50 %	
ing, impregnation and care		
products Polishes, wax /		
cream (floor, furniture,		
shoes).		
,	covers use up to 29 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 430,00 cm2	
	For each use event, covers amount up to 56 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 1,23 hours/event	
Leather tanning, dye, finish-	Covers concentrations up to 50 %	
======================================	201010 0011001111 attorio ap to 00 /0	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

ing, impregnation and care	
products Polishes, spray	
(furniture, shoes).	appears use up to 10 day/year
	covers use up to 8 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 430,00 cm2
	for each use event, covers amount up to (g): 56 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,33 hours/event
Lubricants, greases, release products Liquids.	Covers concentrations up to 100 %
	covers use up to 4 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, covers amount up to 2.200 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,17 hours/event
Lubricants, greases, release products Pastes.	Covers concentrations up to 20 %
	covers use up to 10 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, covers amount up to 34 g
	Covers use in room size of 20 m3
Lubricants, greases, release products Sprays.	Covers concentrations up to 50 %
•	covers use up to 6 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,75 cm2
	For each use event, covers amount up to 73 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,17 hours/event
Polishes and wax blends Polishes, wax / cream (floor, furniture, shoes).	Covers concentrations up to 50 %
· · · · · · ·	covers use up to 29 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 430,00 cm2
	For each use event, covers amount up to 142 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 1,23 hours/event
Polishes and wax blends Polishes, spray (furniture, shoes).	Covers concentrations up to 50 %
,	covers use up to 8 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 430,00 cm2
	For each use event, covers amount up to 35 g
	Covers use in room size of 20 m3

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

	for each use event Covers exposure up to 0,33 hours/event	
Textile dyes, finishing and impregnating products; including bleaches and other processing aids	Covers concentrations up to 10 %	
	covers use up to 365 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 857,50 cm2	
	For each use event, covers amount up to 115 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 1,00 hours/event	

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 -Environment

No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO
Cootion 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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure oceriano - cons			
30000001015			
SECTION 1	EXPOSURE SCENARIO TITLE		
Title	Use in Cleaning Agents - Consumer		
Use Descriptor	Sector of Use: SU21 Product Categories: PC3, PC4, PC8 (excipient only), PC9a, PC24, PC35, PC38 Environmental Release Categories: ERC8a, ERC8d		
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	
Additional Information	No exposure assessment presented for the environment.	

Section 2.1	Control of Consumer Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure > 10 Pa at STP	
Concentration of the Substance in Mixture/Article	Unless stated otherwise.	
	Covers concentration up to (%): 100 %	
Amounts Used		
Unless stated otherwise.		
for each use event, covers amount up to (g):		13.800
covers skin contact area (cm2): 857,5		857,5
Frequency and Duration o	f Use	
Unless stated otherwise.		
covers use up to (times/day of use):		1
Exposure (hours/event):		4
Other Operational Condition	ons affecting Exposure	
Unless stated otherwise.		

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Air care products Air care, instant action (aerosol sprays).	Covers concentrations up to 50 %	
	covers use up to 365 day/year	
	covers use up to 4 times/day of use	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	for each use event, covers amount up to (g): 0,1 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,25 hours/event
Air care products Air care,	Covers use under typical household ventilation.
continuous action (solid and liquid).	Covers use under typical nousehold ventilation.
	Covers concentrations up to 100 %
	covers use up to 365 day/year
	covers use up to 2 times/day of use
	covers skin contact area up to (cm2): 35,70 cm2
	For each use event, covers amount up to 12 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 12 hours/event
Anti-Freeze and de-icing products Washing car window.	Covers concentrations up to 50 %
dow.	covers use up to 365 day/year
	covers use up to 1 times/day of use
	For each use event, covers amount up to 0,5 g
	Covers use in a one car garage (34 m3) under typical ventila-
	tion.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,02 hours/event
Anti-Freeze and de-icing	Covers concentrations up to 50 %
products Pouring into radiator.	Corone contentions up to co /o
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,00 cm2
	For each use event, covers amount up to 2.000 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,17 hours/event
Anti-Freeze and de-icing products Lock de-icer.	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 214,40 cm2
	For each use event, covers amount up to 4 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0.25 hours/event
Biocidal products (e.g. Dis- infectants, pest control) (excipient only). Laundry and dish washing products.	for each use event Covers exposure up to 0,25 hours/event Covers concentrations up to 50 %
infectants, pest control) (excipient only). Laundry	
infectants, pest control) (excipient only). Laundry	Covers concentrations up to 50 %

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	For each use event, covers amount up to 15 g	
	Covers use in room size of 20 m3	
5:	for each use event Covers exposure up to 0,50 hours/event	
Biocidal products (e.g. Dis- infectants, pest control) (excipient only). Cleaners, liquids (all purpose clean-	Covers concentrations up to 50 %	
ers, sanitary products, floor		
cleaners, glass cleaners, carpet cleaners, metal cleaners).		
cleariers).	covers use up to 128 day/year	
	covers use up to 120 day/year	
	covers skin contact area up to (cm2): 857,50 cm2	
	For each use event, covers amount up to 27 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 0,33 hours/event	
Biocidal products (e.g. Dis-	Covers concentrations up to 50 %	
infectants, pest control)	Covers concentrations up to 30 %	
(excipient only). Cleaners,		
trigger sprays (all purpose		
cleaners, sanitary products,		
glass cleaners).		
	covers use up to 128 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,00 cm2	
	For each use event, covers amount up to 35 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 0,17 hours/event	
Coatings and paints, thin- ners, paint removers Wa- terborne latex wall paint.	Covers concentrations up to 50 %	
	covers use up to 4 day/year	
	Covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,75 cm2	
	For each use event, covers amount up to 2.760 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,20 hours/event	
Coatings and paints, thin- ners, paint removers Sol- vent rich, high solid, water borne paint.	Covers concentrations up to 27,5 %	
'	covers use up to 6 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,75 cm2	
	For each use event, covers amount up to 744 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,20 hours/event	
Coatings and paints, thin-	Covers concentrations up to 50 %	
ners, paint removers Aerosol spray can.	·	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	covers use up to 2 day/year	
	covers use up to 1 times/day of use	
	For each use event, covers amount up to 215 g	
	Covers use in a one car garage (34 m3) under typical ventila-	
	tion.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,33 hours/event	
Coatings and paints, thin-	Covers concentrations up to 50 %	
ners, paint removers Re-		
movers (paint-, glue-, wall		
paper-, sealant-remover).		
	covers use up to 3 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 857,50 cm2	
	For each use event, covers amount up to 491 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 2,00 hours/event	
Lubricants, greases, re-	Covers concentrations up to 100 %	
lease products Liquids.		
	covers use up to 4 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 468,00 cm2	
	For each use event, covers amount up to 2.200 g	
	Covers use in a one car garage (34 m3) under typical ventila-	
	tion.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,17 hours/event	
Lubricants, greases, re-	Covers concentrations up to 20 %	
lease products Pastes.	·	
	covers use up to 10 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 468,00 cm2	
	For each use event, covers amount up to 34 g	
	Covers use in room size of 20 m3	
Lubricants, greases, re-	Covers concentrations up to 50 %	
lease products Sprays.	·	
	covers use up to 6 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,75 cm2	
	For each use event, covers amount up to 73 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 0,17 hours/event	
Washing and cleaning	Covers concentrations up to 70 %	
products (including solvent	от то то то то то	
based products) Laundry		
and dish washing products.		
	covers use up to 365 day/year	
	Covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 857,50 cm2	
	For each use event, covers amount up to 15 g	
	Covers use in room size of 20 m3	
	COVERS USE III TOUTH SIZE OF ZUTHS	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	for each use event Covers exposure up to 0,50 hours/event
Washing and cleaning products (including solvent based products) Cleaners, liquids (all purpose cleaners, sanitary products, floor cleaners, glass cleaners, carpet cleaners, metal cleaners).	Covers concentrations up to 70 %
	covers use up to 128 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	For each use event, covers amount up to 27 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,33 hours/event
Washing and cleaning products (including solvent based products) Cleaners, trigger sprays (all purpose cleaners, sanitary products, glass cleaners).	Covers concentrations up to 70 %
	covers use up to 128 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,00 cm2
	For each use event, covers amount up to 35 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,17 hours/event
Welding and soldering products (with flux coatings or flux cores.), flux products	Covers concentrations up to 50 %
, ,	covers use up to 365 day/year
	covers use up to 1 times/day of use
	For each use event, covers amount up to 12 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 1,00 hours/event

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 -Environment
No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE
	EXPOSURE SCENARIO

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure oceriario - consu		
30000001017		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Lubricants - Consumer	
Use Descriptor	Sector of Use: SU21 Product Categories: PC1, PC24, PC31 Environmental Release Categories: ERC8a, ERC8d, ERC9a, ERC9b	
Scope of process	Covers the consumer use of formulated lubricants in closed and open systems including transfer operations, application, operation of engines and similar articles, equipment maintenance and disposal of waste oil.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Additional Information	No exposure assessment presented for the environment.	

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	Unless stated otherwise.	
	Covers concentration up to (%): 100 %	
Amounts Used		
Unless stated otherwise.		
for each use event, covers amount up to (g):		6.390
covers skin contact area (cm2):		468
Frequency and Duration of	Use	
Unless stated otherwise.		
covers use up to (times/day of use):		1
Exposure (hours/event):		6
Other Operational Condition	ons affecting Exposure	
Unless stated otherwise.		

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Adhesives, sealants Glues, hobby use.	Covers concentrations up to 30 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	For each was awart assume amount up to 0 a
	For each use event, covers amount up to 9 g
	Covers use in room size of 20 m3
A.II	for each use event Covers exposure up to 4 hours/event
Adhesives, sealants Glues DIY-use (carpet glue, tile glue, wood parquet glue).	Covers concentrations up to 30 %
<u> </u>	covers use up to 1 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 110,00 cm2
	For each use event, covers amount up to 6.390 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 6,00 hours/event
Adhesives, sealants Glue from spray.	Covers concentrations up to 30 %
-	covers use up to 6 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2
	For each use event, covers amount up to 85,05 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 4,00 hours/event
Adhesives, sealants Sealants.	Covers concentrations up to 30 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 35,73 cm2
	For each use event, covers amount up to 75 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 1,00 hours/event
Lubricants, greases, release products Liquids.	Covers concentrations up to 100 %
	covers use up to 4 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, covers amount up to 2.200 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,17 hours/event
Lubricants, greases, release products Pastes.	Covers concentrations up to 20 %
	covers use up to 10 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, covers amount up to 34 g
	Covers use in room size of 20 m3
Lubricants, greases, release products Sprays.	Covers concentrations up to 50 %
	covers use up to 6 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 428,75 cm2
_	For each use event, covers amount up to 73 g

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,17 hours/event
Polishes and wax blends Polishes, wax / cream (floor, furniture, shoes).	Covers concentrations up to 50 %
	covers use up to 29 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 430,00 cm2
	For each use event, covers amount up to 142 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 1,23 hours/event
Polishes and wax blends Polishes, spray (furniture, shoes).	Covers concentrations up to 50 %
	covers use up to 8 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 430,00 cm2
	For each use event, covers amount up to 35 g
	Covers use in room size of 20 m3
	for each use event Covers exposure up to 0,33 hours/event

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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		

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 No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure occitatio - oc	on sum of
30000001019	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Use in Agrochemicals uses - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC12, 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
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Consumer Exposure			
Product Characteristics				
Physical form of product	Liquid, vapour pressure > 10 Pa at STP			
Concentration of the Substance in Mixture/Article	Unless stated otherwise.			
	Covers concentration up to (%): 50 %			
Amounts Used	Amounts Used			
Unless stated otherwise.				
for each use event, covers amount up to (g):		50		
covers skin contact area (cm2):		857,50		
Frequency and Duration of Use				
Unless stated otherwise.				
covers use up to (times/day of use):		0		
Other Operational Conditions affecting Exposure				

Unless stated otherwise.

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Fertilizers	Covers concentrations up to 50 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 857,50 cm2
	For each use event, assumes swallowed amount of 0,3 g
	Covers use in room size of 20 m3
Plant protection products	Covers concentrations up to 50 %
	covers use up to 365 day/year

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

covers use up to 1 times/day of use
covers skin contact area up to (cm2): 857,50 cm2
For each use event, assumes swallowed amount of 0,3 g
Covers use in room size of 20 m3

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

SECTION 3	EXPOSURE ESTIMATION
Section 3.1 - Health	
The ECETOC TRA tool been b	soon upod to optimate consumer expecures upless otherwise

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

30000001021		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Use as a fuel - Consumer	
Use Descriptor	Sector of Use: SU21	
	Product Categories: PC13	
	Environmental Release Categories: ERC9a, ERC9b	
Scope of process	Covers consumer uses in liquid fuels.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Section 2.1	Control of Consumer Exposure		
Product Characteristics			
Physical form of product	Liquid, vapour pressure > 10 Pa at STI	0	
Concentration of the Substance in Mixture/Article Unless stated otherwise.			
Covers concentration up to (%): 100 %			
Amounts Used	Amounts Used		
Unless stated otherwise.			
for each use event, covers a	mount up to (g):	37.500	
covers skin contact area (cm	2):	420	
Frequency and Duration of	Frequency and Duration of Use		
Unless stated otherwise.			
covers use up to (times/day of use):		0,143	
Exposure (hours/event):		2	
Other Operational Conditions affecting Exposure			

Unless stated otherwise.

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Fuels Liquid: Automotive Refuelling.	Covers concentrations up to 100 %
	covers use up to 52 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 210,00 cm2
	For each use event, covers amount up to 37.500 g
	Covers outdoor use.
	Covers use in room size of 100 m3

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

	for each use event Covers exposure up to 0,05 hours/event	
Fuels Liquid Scooter Refuelling.	Covers concentrations up to 100 %	
- 3	covers use up to 52 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 210,00 cm2	
	For each use event, covers amount up to 3.750 g	
	Covers outdoor use.	
	Covers use in room size of 100 m3	
	for each use event Covers exposure up to 0,03 hours/event	
Fuels Liquid, Garden Equipment - Use.	Covers concentrations up to 100 %	
	covers use up to 26 day/year	
	covers use up to 1 times/day of use	
	For each use event, covers amount up to 750 g	
	Covers outdoor use.	
	Covers use in room size of 100 m3	
	for each use event Covers exposure up to 2,00 hours/event	
Fuels Liquid: Garden Equipment - Refuelling.	Covers concentrations up to 100 %	
	covers use up to 26 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 420,00 cm2	
	For each use event, covers amount up to 750 g	
	Covers use in a one car garage (34 m3) under typical ventilation.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,03 hours/event	
Fuels Liquid: Home space heater fuel.	Covers concentrations up to 100 %	
	covers use up to 26 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 420,00 cm2	
	For each use event, covers amount up to 750 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 8,00 hours/event	
Fuels Liquid: Lamp oil.	Covers concentrations up to 100 %	
	covers use up to 52 day/year	
	Covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 210,00 cm2	
	For each use event, covers amount up to 100 g	
	Covers use in room size of 20 m3	
	for each use event Covers exposure up to 0,01 hours/event	

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure ocenano - consumer		
30000001023		
SECTION 1	EXPOSURE SCENARIO TITLE	
Title	Functional Fluids - Consumer	
Use Descriptor	Sector of Use: SU21 Product Categories: PC16, PC17 Environmental Release Categories: ERC9a, ERC9b	
Scope of process	Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Additional Information	No exposure assessment presented for the environment.	

Section 2.1	Control of Consumer Exposure	
Product Characteristics		
Physical form of product	Liquid, vapour pressure > 10 Pa at STP	
Concentration of the Substance in Mixture/Article	Unless stated otherwise.	
Covers concentration up to (%): 100 %		
Amounts Used		
Unless stated otherwise.		
for each use event, covers a	mount up to (g):	2.200
covers skin contact area (cm2):		468
Frequency and Duration of Use		
Unless stated otherwise.		
covers use up to (times/day	of use):	0,010
Exposure (hours/event):		0,167
Other Operational Conditions affecting Exposure		
Unless stated otherwise. Covers use at ambient temperatures. Covers use in room size of 20m3 Covers use under typical household ventilation.		

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Heat transfer fluids Liquids.	Covers concentrations up to 100 %
	covers use up to 4 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, assumes swallowed amount of 2.200 g
	Covers use in a one car garage (34 m3) under typical ventila-
	tion.
	Covers use in room size of 34 m3

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

	for each use event Covers exposure up to 0,17 hours/event
Hydraulic fluids Liquids.	Covers concentrations up to 100 %
	covers use up to 4 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 468,00 cm2
	For each use event, covers amount up to 2.200 g
	Covers use in a one car garage (34 m3) under typical ventila-
	tion.
_	Covers use in room size of 34 m3
	for each use event Covers exposure up to 0,17 hours/event

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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

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

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

IPA Pharma

Date of last issue: 06.04.2023 Version Revision Date: SDS Number:

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure occitano consumer	
30000001024	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	De-icing and anti-icing applications - Consumer
Use Descriptor	Sector of Use: SU21
	Product Categories: PC4
	Environmental Release Categories: ERC8d
Scope of process	De-icing of vehicles and similar equipment by spraying.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Additional Information	No exposure assessment presented for the environment.

Control of Consumer Exposure		
Liquid, vapour pressure > 10 Pa a	t STP	
Unless stated otherwise.		
Covers concentration up to (%): 4	0 %	
for each use event, covers amount up to (g): 2.000		
covers skin contact area (cm2):		
f Use	•	
Unless stated otherwise.		
covers use up to (times/day of use):		
Covers exposure up to (hours/event): 0,25		
Other Operational Conditions affecting Exposure		
	Liquid, vapour pressure > 10 Pa a Unless stated otherwise. Covers concentration up to (%): 4 amount up to (g): n2): f Use of use): rs/event):	

Unless stated otherwise.

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Anti-Freeze and de-icing products Washing car window.	Covers concentrations up to 20 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	For each use event, covers amount up to 0,5 g
	Covers use in a one car garage (34 m3) under typical ventilation.
	Covers use in room size of 34 m3

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

	for each use event Covers exposure up to 0,02 hours/event	
Anti-Freeze and de-icing	Covers concentrations up to 20 %	
products Pouring into radia-	Covers concentrations up to 20 //	
, .		
tor.		
	covers use up to 365 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 428,00 cm2	
	For each use event, covers amount up to 2.000 g	
	Covers use in a one car garage (34 m3) under typical ventila-	
	tion.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,17 hours/event	
Anti-Freeze and de-icing	Covers concentrations up to 50 %	
products Lock de-icer.		
	covers use up to 365 day/year	
	covers use up to 1 times/day of use	
	covers skin contact area up to (cm2): 214,40 cm2	
	For each use event, covers amount up to 4 g	
	Covers use in a one car garage (34 m3) under typical ventila-	
	tion.	
	Covers use in room size of 34 m3	
	for each use event Covers exposure up to 0,25 hours/event	

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

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		

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 No exposure assessment presented for the environment.

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

30000001025		
SECTION 1 EXPOSURE SCENARIO TITLE		
Title	Other Consumer Uses - Consumer	
Use Descriptor	Sector of Use: SU21 Product Categories: PC28, PC39 Environmental Release Categories: ERC8a, ERC8d	
Scope of process	Consumer uses e.g. as a carrier in cosmetics/personal care products, perfumes and fragrances. Note: For cosmetic and personal care products, risk assessment only required for the environment under REACH as human health is covered by alternative legislation.	

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Additional Information	No exposure assessment presented for human health. No exposure assessment presented for the environment.	

Section 2.1	Control of Consumer Exposure
Product Characteristics	

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT		
	MEASURES		

Section 2.2	Control of Environmental Exposure
-------------	-----------------------------------

SECTION 3	EXPOSURE ESTIMATION	
Section 3.1 - Health		
No exposure assessment presented for human health.		

Section 3.2 - Environment

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO	
Section 4.1 - Health		
No exposure assessment presented for human health.		

Section 4.2 -Environment	
No exposure assessment presented for the environment.	

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

Exposure Scenario - Consumer

Exposure occitatio - oc	2115umer
30000001026	
SECTION 1	EXPOSURE SCENARIO TITLE
Title	Water treatment chemicals - Consumer
Use Descriptor	Sector of Use: SU21 Product Categories: PC36, PC37 Environmental Release Categories: ERC8f
Scope of process	Covers the use of the substance for the treatment of water in open and closed systems.

SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES	
Additional Information	No exposure assessment presented for the environment.	

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	Unless stated otherwise.		
	Covers concentration up to (%): 20 %		
Amounts Used			
Unless stated otherwise.			
for each use event, covers amount up to (g):		10	
covers skin contact area (cm2):		6.600	
Frequency and Duration of Use			
Unless stated otherwise.			
covers use up to (times/day of use):		1	
Other Operational Conditions affecting Exposure			

Unless stated otherwise.

Covers use at ambient temperatures.

Covers use in room size of 20m3

Product Categories	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Water softeners	Covers concentrations up to 20 %
	covers use up to 365 day/year
	covers use up to 1 times/day of use
	covers skin contact area up to (cm2): 6.600 cm2
	For each use event, assumes swallowed amount of 0,02 mg
	For each use event, covers amount up to 10 g
	Covers use in room size of 20 m3
Water treatment chemicals	Covers concentrations up to 20 %

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

IPA Pharma

Version Revision Date: SDS Number: Date of last issue: 06.04.2023

1.2 18.08.2023 800001034234 Print Date 26.08.2023

covers use up to 365 day/year
covers use up to 1 times/day of use
covers skin contact area up to (cm2): 6.600 cm2
For each use event, assumes swallowed amount of 0,15 mg
For each use event, covers amount up to 10 g
Covers use in room size of 20 m3

Section 2.2	Control of Environmental Exposure	
No exposure assessment presented for the environment.		

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

Section 3.2 - Environment

No exposure assessment presented for the environment.

SECTION 4	GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO	
Section 4.1 - Health		
D 11 1 1 1 DN/ADEL 1 1 D1 1 A4 1		

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