

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2021

Version number 39

Revision: 23.11.2021

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

- **1.1 Product identifier**
- **Molecular formula:** C₃ H₆ O
- **Structure formula:** C H₃ - C O - C H₃
- **Trade name:** propanone
- **SDS number:** CH0014
- **CAS Number:**
67-64-1
- **EC number:**
200-662-2
- **Index number:**
606-001-00-8
- **Application of the substance / the mixture** Chemicals products for laboratory
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CARLO ERBA REAGENTS
Chaussée du Vexin
Parc d'Affaires des Portes - BP616
27106 VAL DE REUIL Cedex
Téléphone: +33 (0)2 32 09 20 00
Télécopie: +33 (0)2 32 09 20 20
- **Further information obtainable from:**
Q.A / Normative
email: MSDS_CER-SDS@cer.dgroup.it
- **1.4 Emergency telephone number:**
France (ORFILA 24h/24) - Tel : +33 (0)1 45 42 59 59
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Flam. Liq. 2 H225 Highly flammable liquid and vapour.



Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02 GHS07

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- **Signal word** *Danger*
- **Hazard statements**
 - H225 *Highly flammable liquid and vapour.*
 - H319 *Causes serious eye irritation.*
 - H336 *May cause drowsiness or dizziness.*
- **Precautionary statements**
 - P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
 - P280 *Wear protective gloves / eye protection / face protection.*
 - P303+P361+P353 *IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*
 - P304+P340 *IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
 - P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 - P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
- **Additional information:**
 - EUH066 *Repeated exposure may cause skin dryness or cracking.*
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
 - CAS: 67-64-1 *Acetone*
- **Identification number(s)**
- **EC number:** 200-662-2
- **Index number:** 606-001-00-8

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** *Supply fresh air.*
- **After skin contact:**
 - Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse.*
 - If skin irritation continues, consult a doctor.*
- **After eye contact:**
 - Rinse opened eye for several minutes under running water.*
 - Seek immediate medical advice.*
- **Information for doctor:** *Show the doctor this Material Safety Data Sheet.*
- **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **4.3 Indication of any immediate medical attention and special treatment needed**
 - No further relevant information available.*

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** *CO2 or alcohol resistant foam.*

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- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture** Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Do not inhale gases in case of fire or combustion.
- **Additional information** Keep receptacles cool with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Keep away any ignition source.
Wear protective equipment. Keep unprotected persons away.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Dilute with plenty of water after collecting the liquid.
Do not allow product to reach sewage system or any water course.
Prevent seepage into sewage system, workpits and cellars.
- **6.3 Methods and material for containment and cleaning up:**
Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Only handle and refill product in closed systems or under local exhaust.
Pneumatic conveyance only with nitrogen or other inert gases.
- **Information about fire - and explosion protection:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.

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Trade name: propanone· 7.3 **Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:****CAS: 67-64-1 Acetone**

WEL Short-term value: 3620 mg/m³, 1500 ppm
 Long-term value: 1210 mg/m³, 500 ppm

· **DNELs**

Dermal	DNEL (workers-systemic chronic effects)	186 mg/kg
Inhalative	DNEL (workers-local effects Acute)	2,420 mg/m ³
	DNEL (workers-systemic chronic effects)	1,210 mg/m ³

· **PNECs**

PNEC (Fresh water)	10.6 mg/l
PNEC (Intermittent rejection)	21 mg/l
PNEC (Freshwater sediment)	30.4 mg/kg
PNEC (Marine water)	1.06 mg/l
PNEC (Seawater sediment)	3.04 mg/l
PNEC (STP)	100 mg/l
PNEC (Soil)	33.3 mg/kg

· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Do not inhale fumes / aerosols.

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Use suitable respiratory protective device only when aerosol or mist is formed.

Filter AX



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter P2

Suitable respiratory protective device recommended in case of leakages or handling in open devices.

· **Recommended filter device for short term use:** Filter AX

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· **Protection of hands:**

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

Rubber gloves

· **Material of gloves**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

The penetration time has to be at least 480 minutes

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

· **Eye protection:**



Tightly sealed goggles

· **Limitation and supervision of exposure into the environment**

In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· **Risk management measures** Keep good industrial hygiene.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

Molecular weight 58.01 g

· **Appearance:**

Form: Fluid

Colour: Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **Change in condition**

Melting point/freezing point: -94.7 °C

Initial boiling point and boiling range: 55.8-56.6 °C

· **Flash point:** -18 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 465 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 2.6 Vol %

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Upper:	13 Vol %
· Vapour pressure at 20 °C:	233 hPa
· Vapour pressure (2) at 50 °C:	800 hPa
· Density at 20 °C:	0.79 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· organic solvents:	Soluble in many organic solvents.

· Partition coefficient: n-octanol/water:	-0.24033
· Viscosity:	
Dynamic at 20 °C:	0.33 mPas
Kinematic:	Not determined.

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** See 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.
Reacts with strong oxidising agents.
- **10.4 Conditions to avoid**
Direct heat, high temperature.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **10.5 Incompatible materials:**
Strong Oxidant.
Strong bases.
- **10.6 Hazardous decomposition products:** Carbon monoxide, Carbon dioxide.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

Oral	LD50	5,800 mg/kg (rat) (OECD 401)
Dermal	LD50	>15,800 mg/kg (rat)
Inhalative	LC50/4 h	76 mg/L (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Strong irritant with the danger of severe eye injury.
Causes serious eye irritation.
- **Ingestion:** It can be harmful if swallowed.
- **Inhalation:** May be harmful if inhaled.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Other information (about experimental toxicology):** No further relevant information available.

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- **Target organ information**
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

NOEC	530 mg/L (algae) (8 h) fresh water
	2,212 mg/L (Daphnia) (28 d)
EC50/48h	8,800 mg/l (Daphnia)
LC50/96h	5,540 mg/l (fishes)

- **12.2 Persistence and degradability** No further relevant information available.
- **Method**
- **Ecological information** The product is easily biodegradable.
- **BOD5/ThOD:** 84% 5d
- **Other information:** The product is easily biodegradable.
- **12.3 Bioaccumulative potential**
Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** Do not allow to reach ground water, water bodies or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Reutilise if possible or contact a waste processors for recycling or safe disposal.
- **Uncleaned packaging:**
The containers and packaging materials contaminated with dangerous substances or preparations, have the same treatment of products.
Directive 94/62/EC of the European Parliament and the Council of 20 December 1994 on packaging and packaging waste.
- **Recommendation:**
Disposal must be made according to official regulations.
Wash with solvents to be incinerated.

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Packagings that may not be cleansed are to be disposed of in the same manner as the product.
 · **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR/RID, IMDG, IATA 	<p style="text-align: right;">UN1090</p>
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR/RID · IMDG · IATA 	<p style="text-align: right;">1090 ACETONE ACETONE Acetone</p>
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR/RID 	<div style="text-align: center;">  </div> <p style="text-align: right;">3 (F1) Flammable liquids.</p> <p style="text-align: right;">3</p>
<ul style="list-style-type: none"> · IMDG, IATA 	<div style="text-align: center;">  </div> <p style="text-align: right;">3 Flammable liquids.</p> <p style="text-align: right;">3</p>
<ul style="list-style-type: none"> · 14.4 Packing group · ADR/RID, IMDG, IATA 	<p style="text-align: right;">II</p>
<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: 	<p style="text-align: right;">No</p>
<ul style="list-style-type: none"> · 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category 	<p style="text-align: right;">Warning: Flammable liquids. 33 F-E,S-D E</p>
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	
<ul style="list-style-type: none"> · ADR/RID · Excepted quantities (EQ): · Limited quantities (LQ) · Excepted quantities (EQ) 	<p style="text-align: right;">E2 1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> · Transport category · Tunnel restriction code 	<p style="text-align: right;">2 D/E</p>

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- | | |
|--|--|
| <ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | <p style="margin: 0;">1L</p> <p style="margin: 0;">Code: E2</p> <p style="margin: 0;">Maximum net quantity per inner packaging: 30 ml</p> <p style="margin: 0;">Maximum net quantity per outer packaging: 500 ml</p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p style="margin: 0;">UN 1090 ACETONE, 3, II</p> |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Chemical safety assessment**
 - **Named dangerous substances - ANNEX I Substance is not listed.**
 - **Seveso category P5c FLAMMABLE LIQUIDS**
 - **Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t**
 - **Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t**
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| NK | 50-100 |
- **Waterhazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.**
 - **Other regulations, limitations and prohibitive regulations**
 - **Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.**
 - **15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.**

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS: Q.A./Normative**
 - **Abbreviations and acronyms:**
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- RCR : Risk Characterisation Ratio
- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- IMO : International Maritime Organization
- Flam. Liq. 2: Flammable liquids – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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· Sources

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH, in latest valid version.

Regulation (EC) N° 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, in the latest valid version.

Globally Harmonized System, GHS

ADR, IMDG, IATA

PubChem : an open chemistry database at the National Institutes of Health (NIH)

ECHA : European CHEmicals Agency

GESTIS : Information system on hazardous substances of the German Social Accident Insurance

· *** Data compared to the previous version altered. .**

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Annex: Exposure scenario 1

- **Short title of the exposure scenario** Chemicals products for laboratory
- **Sector of Use** Industrial use.
- **Process category**
 PROC10 Roller application or brushing
 PROC15 Use as laboratory reagent
- **Environmental release category**
 ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
- **Description of the activities / processes covered in the Exposure Scenario**
 See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use** Customary application according to section 1.
- **Duration and frequency** 8hrs (full working shift).
- **Worker** 8hrs (full working shift).
- **Physical parameters**
 The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Other operational conditions** Observe the general safety regulations when handling chemicals.
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
 Avoid contact with eyes.
 Take precautionary measures against static discharge.
 Keep away from sources of ignition - No smoking.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures**
 Keep good industrial hygiene.
 Ensure that activities are executed by specialists or authorised personnel only.
 Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
 Provide sufficient washing facilities.
 Work clothes must not consist of textiles that exhibit dangerous melting behaviour in case of fire.
- **Technical protective measures** Ensure good ventilation/exhaustion at the workplace.
- **Personal protective measures**
 Avoid contact with the eyes.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 Protective gloves
 Rubber gloves
 Tightly sealed goggles
 The usual precautionary measures are to be adhered to when handling chemicals.
 Detailed measures on hand protection according to Safety Data Sheet, section 8.
 Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
 Use suitable respiratory protective device only when aerosol or mist is formed.
 Filter AX
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 Filter P2
 Suitable respiratory protective device recommended in case of leakages or handling in open devices.

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· **Environmental protection measures**

· **Water** Do not allow to reach ground water, water bodies or sewage system.

· **Notes** In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· **Disposal measures** Ensure that waste is collected and contained.

· **Disposal procedures**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Waste type** Partially emptied and uncleaned packaging

· **Exposure estimation**

· **Worker (dermal)**

The highest dermal exposure to be expected is 27.43 mg / kg / day.

RCR 0.147

The exposure estimation was carried out in accordance with ECETOC TRA.

· **Worker (inhalation)**

The highest inhalative exposure to be expected is 250 ppm.

RCR 0.5

The exposure estimation was carried out in accordance with ECETOC TRA.

· **Environment**

https://www.reachcentrum.eu/Consortia%20Documents/P-I169/Other/P-I169_EC200-662-2_other_ECT.xls

· **Consumer** Not relevant for this Exposure Scenario.

· **Guidance for downstream users**

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.

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Annex: Exposure scenario 2

- **Short title of the exposure scenario** Formulation or re-packing
- **Sector of Use** Industrial use.
- **Process category**
 - PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
 - PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
 - PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
 - PROC4 Chemical production where opportunity for exposure arises
 - PROC5 Mixing or blending in batch processes
 - PROC6 Calendering operations
 - PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
 - PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
 - PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
 - PROC10 Roller application or brushing
 - PROC14 Tableting, compression, extrusion, pelletisation, granulation
 - PROC15 Use as laboratory reagent
- **Environmental release category**
 - ERC1 Manufacture of the substance
 - ERC2 Formulation into mixture
 - ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
 - ERC6a Use of intermediate
- **Description of the activities / processes covered in the Exposure Scenario**
See section 1 of the annex to the Safety Data Sheet.
- **Conditions of use** Customary application according to section 1.
- **Duration and frequency** 8hrs (full working shift).
- **Worker** 8hrs (full working shift).
- **Environment** 360 d/y
- **Physical parameters**
The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.
- **Physical state** Fluid
- **Concentration of the substance in the mixture** Raw material.
- **Other operational conditions** Observe the general safety regulations when handling chemicals.
- **Other operational conditions affecting environmental exposure** No special measures required.
- **Other operational conditions affecting worker exposure**
Avoid contact with eyes.
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- **Risk management measures**
- **Worker protection**
- **Organisational protective measures**
Keep good industrial hygiene.
Ensure that activities are executed by specialists or authorised personnel only.
Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.
Provide sufficient washing facilities.
Work clothes must not consist of textiles that exhibit dangerous melting behaviour in case of fire.
- **Technical protective measures** Ensure good ventilation/exhaustion at the workplace.

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Safety data sheet
according to 1907/2006/EC, Article 31

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· Personal protective measures*Avoid contact with the eyes.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation**Protective gloves**Rubber gloves**Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.**Tightly sealed goggles**The usual precautionary measures are to be adhered to when handling chemicals.**Detailed measures on hand protection according to Safety Data Sheet, section 8.**Use suitable respiratory protective device only when aerosol or mist is formed.**In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.**Filter P2**Suitable respiratory protective device recommended in case of leakages or handling in open devices.**Protective work clothing***· Environmental protection measures****· Water** *Do not allow to reach ground water, water bodies or sewage system.***· Notes** *In case of unintended release of the product: See section 6 of the Safety Data Sheet.***· Disposal measures** *Ensure that waste is collected and contained.***· Disposal procedures***Must not be disposed together with household garbage. Do not allow product to reach sewage system.***· Waste type** *Partially emptied and uncleaned packaging***· Exposure estimation****· Worker (dermal)***The highest dermal exposure to be expected is 27.43 mg / kg / day.**The exposure estimation was carried out in accordance with ECETOC TRA.***· Worker (inhalation)***The highest inhalative exposure to be expected is 250 ppm.**The exposure estimation was carried out in accordance with ECETOC TRA.***· Environment***https://www.reachcentrum.eu/Consortia%20Documents/P-I169/Other/P-I169_EC200-662-2_other_ECT.xls***· Consumer** *Not relevant for this Exposure Scenario.***· Guidance for downstream users***Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.*