

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

Page 1/11

Printing date 05.05.2020

Revision: 05.05.2020

Version number 9

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

· **1.1 Product identifier**

· **Trade name:** cyclohexane

· **Article number:** 1250

· **CAS Number:**  
110-82-7

· **EC number:**  
203-806-2

· **Index number:**  
601-017-00-1

· **Registration number** 01-2119463273-41-XXXX

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

· **Sector of Use**

SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

SU9 Manufacture of fine chemicals

SU8 Manufacture of bulk, large scale chemicals (including petroleum products)

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

· **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

PROC7 Industrial spraying

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

PROC12 Use of blowing agents in manufacture of foam

PROC13 Treatment of articles by dipping and pouring

PROC14 Tableting, compression, extrusion, pelletisation, granulation

PROC15 Use as laboratory reagent

PROC16 Use of fuels

PROC21 Low energy manipulation and handling of substances bound in/on materials or articles

· **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)

(Contd. on page 2)

GB

Trade name: cyclohexane

(Contd. of page 1)

- ERC6a Use of intermediate
- ERC6c Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)
- ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
- ERC7 Use of functional fluid at industrial site

· **Application of the substance / the mixture**

Laboratory chemical  
Chemical for synthesis

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

PANREAC QUIMICA S.L.U.  
C/Garraf 2  
Polígono Pla de la Bruguera  
E-08211 Castellar del Vallès (Barcelona)

Tel. (+34) 937 489 400  
Fax. (+34) 937 489 401  
e-mail: product.safety@panreac.com

· **Further information obtainable from:** email: product.safety@panreac.com

· **1.4 Emergency telephone number:**

Single telephone number for emergency calls: 112 (EU)  
Tel.: (+34) 937 489 499

## 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.  
Skin Irrit. 2      H315 Causes skin irritation.  
STOT SE 3      H336 May cause drowsiness or dizziness.  
Asp. Tox. 1      H304 May be fatal if swallowed and enters airways.  
Aquatic Acute 1      H400 Very toxic to aquatic life.  
Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.

· **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   GHS08   GHS09

· **Signal word** Danger

· **Hazard statements**

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.  
H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P280      Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P310      IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P321      Specific treatment (see on this label).  
P331      Do NOT induce vomiting.  
P303+P361+P353      IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P362+P364      Take off contaminated clothing and wash it before reuse.

(Contd. on page 3)

Trade name: cyclohexane

(Contd. of page 2)

- P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **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**  
110-82-7 cyclohexane
- **Identification number(s)**
- **EC number:** 203-806-2
- **Index number:** 601-017-00-1

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Involve doctor immediately.
- **After inhalation:**  
Supply fresh air; consult doctor in case of complaints.  
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**  
Call a doctor immediately.  
Immediately wash with water and soap and rinse thoroughly.  
Immediately remove any clothing soiled by the product.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Do not induce vomiting; call for medical help immediately.  
Risk of aspiration!
- **4.2 Most important symptoms and effects, both acute and delayed**  
Headache  
Dizziness  
Unconsciousness  
Coughing  
Nausea  
Gastric or intestinal disorders
- **4.3 Indication of any immediate medical attention and special treatment needed**  
Treat symptomatically and supportively.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Forms explosive mixtures with air at ambient temperatures.  
Vapours are heavier than air and may spread along floors.  
Beware of backfiring.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.

(Contd. on page 4)

Trade name: cyclohexane

(Contd. of page 3)

Wear fully protective suit.

· **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

## SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

Avoid substance contact.

Do not inhale steams/aerosols.

· **6.2 Environmental precautions:**

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Clean up affected area.

· **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**

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

· **Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect from heat.

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.

Prevent any seepage into the ground.

· **Information about storage in one common storage facility:**

Store away from oxidising agents.

Away from sources of ignition and heat.

· **Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

Open receptacle only under localised extractor facilities.

Store receptacle in a well ventilated area.

Store only outside or in explosion proof rooms.

Store under lock and key and with access restricted to technical experts or their assistants only.

· **Recommended storage temperature:** Room Temperature

· **Storage class:** 3

(Contd. on page 5)

Trade name: cyclohexane

(Contd. of page 4)

- **7.3 Specific end use(s)** No further relevant information available.

## SECTION 8: Exposure controls/personal protection

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

### · 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

#### 110-82-7 cyclohexane

WEL Short-term value: 1050 mg/m<sup>3</sup>, 300 ppm  
Long-term value: 350 mg/m<sup>3</sup>, 100 ppm

### · DNELs

Oral	Long-term - systemic effects, general population	54.9 mg/kg
Dermal	Long-term - systemic effects, worker	2,016 mg/kg
	Long term - systemic effects, general population	1,186 mg/kg
Inhalative	Acute - local effects, worker	700 mg/m <sup>3</sup>
	Acute - systemic effects, worker	700 mg/m <sup>3</sup>
	Long-term - systemic effects, worker	700 mg/m <sup>3</sup>
	Long-term - local effects, worker	700 mg/m <sup>3</sup>
	Acute - systemic effects, general population	412 mg/m <sup>3</sup>
	Acute - local effects, general population	412 mg/m <sup>3</sup>
	Long-term - systemic effects, general population	206 mg/m <sup>3</sup>
	Long-term - local effects, general population	206 mg/m <sup>3</sup>

### · PNECs

Aquatic compartment - freshwater	0.207 mg/L
Aquatic compartment - marine water	0.207 mg/L
Aquatic compartment - sediment in freshwater	3.627 mg/kg
Aquatic compartment - sediment in marine water	3.627 mg/kg
Terrestrial compartment - soil	2.99 mg/kg
Sewage treatment plant	3.24 mg/L

- **Additional information:** The lists valid during the making were used as basis.

### · 8.2 Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.

#### · Respiratory protection:

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 A

#### · Protection of hands:



Protective 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

(Contd. on page 6)

Trade name: cyclohexane

(Contd. of page 5)

- **Material of gloves**  
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:**  
Nitrile rubber, NBR  
Recommended thickness of the material:  $\geq 0.4$  mm  
Value for the permeation: Level  $\geq 480$  min
- **As protection from splashes gloves made of the following materials are suitable:**  
Nitrile rubber, NBR  
Recommended thickness of the material:  $\geq 0.11$  mm  
Value for the permeation: Level  $\geq 30$  min
- **Eye protection:**  
 Tightly sealed goggles
- **Body protection:**  
Use protective suit.  
Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
  - **Form:** Fluid
  - **Colour:** Colourless
  - **Odour:** Characteristic
  - **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/freezing point:** 6 °C
  - **Initial boiling point and boiling range:** 81 °C
- **Flash point:** -18 °C
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:** 260 °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:** 1.2 Vol %
  - **Upper:** 8.3 Vol %
- **Vapour pressure at 20 °C:** 103 hPa
- **Density at 20 °C:** 0.78 g/cm<sup>3</sup>
- **Relative density at 20 °C:** 0.8
- **Vapour density at 20 °C:** 2.9 g/cm<sup>3</sup>

(Contd. on page 7)

Trade name: cyclohexane

(Contd. of page 6)

· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water at 20 °C:</b>	0.05 g/l
· <b>Partition coefficient: n-octanol/water:</b>	3.44
· <b>Viscosity:</b>	
Dynamic at 20 °C:	0.98 mPas
Kinematic:	Not determined.
· <b>9.2 Other information</b>	No further relevant information available.

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
Warming. A range from approx. 15 Kelvin below the flash point is to be rated as critical.
- **10.3 Possibility of hazardous reactions**  
Risk of ignition or formation of inflammable gases or vapors with:  
strong oxidants
- **10.4 Conditions to avoid** Heating
- **10.5 Incompatible materials:** oxidizing agent
- **10.6 Hazardous decomposition products:** In the event of fire: See chapter 5

## 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:**  
Quantitative data on the toxicological effect of this product are not available.

· <b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Species</b>
Oral LD50	5,100 mg/kg	(rat)	

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **After inhalation:** Irritant to skin and mucous membranes.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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**  
May be fatal if swallowed and enters airways.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.

· <b>Type of test</b>	<b>Effective concentration</b>	<b>Method</b>	<b>Assessment</b>
EC50	0.1-1 mg/l	(Algae)	

(Contd. on page 8)

Trade name: cyclohexane

(Contd. of page 7)

LC50/96 h	0.1-1 mg/l (Aquatic Invertebrata) 0.1-1 mg/l (fish)
-----------	--

- **12.2 Persistence and degradability** The product is easily biodegradable.
- **12.3 Bioaccumulative potential**  
May be accumulated in organism  
3.44 log Pow
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**  
Also poisonous for fish and plankton in water bodies.  
Very toxic for aquatic organisms  
Do not allow product to reach ground water, water course or sewage system.  
Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water  
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Chemicals must be disposed of in compliance with the respective national regulations.  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**  
Disposal must be made according to official regulations.  
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

### SECTION 14: Transport information

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN-Number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>                                | <p>UN1145</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul> | <p>CYCLOHEXANE, ENVIRONMENTALLY HAZARDOUS<br/>CYCLOHEXANE</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul>                           | <p>3 (F1) Flammable liquids.<br/>3</p>                        |



· **Class**  
· **Label**

(Contd. on page 9)



Trade name: cyclohexane

(Contd. of page 8)

· **IMDG, IATA**



· **Class** 3 Flammable liquids.  
· **Label** 3

· **14.4 Packing group**  
· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:** Environmentally hazardous substance, liquid  
· **Marine pollutant:** No  
· **Special marking (ADR):** Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Flammable liquids.  
· **Hazard identification number (Kemler code):** 33  
· **EMS Number:** F-E,S-D  
· **Stowage Category** E

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**  
· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml  
· **Transport category** 2  
· **Tunnel restriction code** D/E

· **IMDG**  
· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

· **UN "Model Regulation":** UN 1145 CYCLOHEXANE, 3, II, ENVIRONMENTALLY HAZARDOUS

## SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **Seveso category**  
E1 Hazardous to the Aquatic Environment  
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40, 57
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

GB

(Contd. on page 10)

Trade name: cyclohexane

(Contd. of page 9)

## 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.

### · Abbreviations and acronyms:

ADR: Accord européen sur le transport 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  
vPvB: very Persistent and very Bioaccumulative  
Flam. Liq. 2: Flammable liquids – Category 2  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
Asp. Tox. 1: Aspiration hazard – Category 1  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

## Annex: Exposure scenario

· **Short title of the exposure scenario** Formulation and packing/repacking of substances and mixtures

### · Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites  
SU8 Manufacture of bulk, large scale chemicals (including petroleum products)  
SU9 Manufacture of fine chemicals  
SU10 Formulation [mixing] of preparations and/or re-packaging (excluding alloys)

### · 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  
PROC7 Industrial spraying  
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  
PROC12 Use of blowing agents in manufacture of foam  
PROC13 Treatment of articles by dipping and pouring  
PROC14 Tableting, compression, extrusion, pelletisation, granulation  
PROC15 Use as laboratory reagent  
PROC16 Use of fuels  
PROC21 Low energy manipulation and handling of substances bound in/on materials or articles

### · 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  
ERC6c Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)

(Contd. on page 11)

Trade name: cyclohexane

(Contd. of page 10)

- ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
- ERC7 Use of functional fluid at industrial site
- **Description of the activities / processes covered in the Exposure Scenario**  
See section 1 of the annex to the Safety Data Sheet.
  - **Conditions of use**
  - **Duration and frequency** 5 workdays/week.
  - **Physical parameters**
  - **Physical state** Fluid
  - **Concentration of the substance in the mixture** Raw material.
  - **Used amount per time or activity** ≤ 1 tons per day
  - **Other operational conditions**
  - **Other operational conditions affecting environmental exposure** Use only on hard ground.
  - **Other operational conditions affecting worker exposure**  
Avoid contact with the skin.  
Take precautionary measures against static discharge.  
Keep away from sources of ignition - No smoking.
  - **Other operational conditions affecting consumer exposure** No special measures required.
  - **Other operational conditions affecting consumer exposure during the use of the product**  
Not applicable.
  - **Risk management measures**
  - **Worker protection**
  - **Organisational protective measures** No special measures required.
  - **Technical protective measures**  
Provide explosion-proof electrical equipment.  
Use product only in enclosed systems.  
Ensure that suitable extractors are available on processing machines
  - **Personal protective measures**  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Protective 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
  - **Measures for consumer protection** Ensure adequate labelling.
  - **Environmental protection measures**
  - **Water** Do not allow to reach sewage system.
  - **Soil** Prevent contamination of soil.
  - **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**
  - **Consumer** Not relevant for this Exposure Scenario.
  - **Guidance for downstream users** No further relevant information available.

GB