

**Safety data sheet  
according to UK REACH**

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

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

- **1.1 Product identifier**
- **Trade name:** Ethanol
- **Article number:** 2222, 2246, 2273, 2286
- **CAS Number:**  
64-17-5
- **EC number:**  
200-578-6
- **Index number:**  
603-002-00-5
- **Registration number** 01-2119457610-43-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
The product is not intended for use by consumers  
For professional users only
- **Life cycle stages** IS Use at industrial Sites
- **Sector of Use** SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Product category** PC21 Laboratory chemicals
- **Process category** PROC15 Use as laboratory reagent
- **Application of the substance / the mixture**  
Industrial use  
Laboratory chemical  
Chemical analytics  
Solvents
  - Laboratory chemical
  - Solvent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Th. Geyer GmbH & Co. KG  
Dornierstr. 4 – 6  
D-71272 Renningen  
  
Tel.: +49(0)7159-1637-0, Fax: +49 (0)7159/18417  
www.thgeyer.de  
sicherheitsdatenblaetter@thgeyer.de
- **Further information obtainable from:** Product management department
- **1.4 Emergency telephone number:**  
National Poisons Information Service  
City Hospital  
Dudley Road  
Birmingham B18 7QH  
Tel.: Emergency: (00 44) 87 06 00 62 66  
Members of the public seeking specific information on poisons should contact:  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111

(Contd. on page 2)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 1)

## SECTION 2: Hazards identification

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



GHS02 flame

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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the GB CLP regulation.

- **Hazard pictograms**



GHS02 GHS07

- **Signal word** Danger

- **Hazard statements**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P403+P235 Store in a well-ventilated place. Keep cool.

- **2.3 Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

- **3.1 Substances**

- **CAS No. Description**

CAS: 64-17-5 Ethanol

- **Identification number(s)**

- **EC number:** 200-578-6

- **Index number:** 603-002-00-5

## SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:**

First aider needs to protect himself.

Immediately remove any clothing soiled by the product.

(Contd. on page 3)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

**Trade name: Ethanol**

(Contd. of page 2)

- **After inhalation:**  
Remove person from danger zone.  
Seek medical treatment in case of complaints.  
Supply fresh air.
- **After skin contact:**  
Wash with plenty of soap and water, take off soiled clothes and shoes.  
After prolonged contact (accidental/forced) or any signs of skin changes (redness or other signs of inflammation), consult a doctor.  
Take into account possible simultaneous inhalation.
- **After eye contact:**  
Remove contact lenses.  
Immediately rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Consult a doctor if you feel unwell.
- **Information for doctor:** Please observe safety data sheet/label.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Vertigo  
Nausea  
Headache  
Dazed feeling  
Gastric or intestinal disorders
- **4.3 Indication of any immediate medical attention and special treatment needed** Symptomatic treatment.

## SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
Water spray, powder, carbon dioxide or foam. Fight larger fires with water spray or alcohol resistant foam.
- **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 oxides (CO, CO<sub>2</sub>)  
Combustible.  
Vapours are heavier than air and spread over the ground.  
Explosive mixtures with air are possible with strong heating.  
Formation of hazardous vapours possible due to ambient fire.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Cool endangered receptacles with water spray.  
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Clear the danger zone.  
Keep away from ignition sources.  
Avoid contact with eyes and skin.  
Ensure adequate ventilation.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Explosion hazard.  
Do not allow to enter sewers/surface or ground water.

(Contd. on page 4)

E

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 3)

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

- Cover the sewerage system.
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Ensure adequate ventilation.
- Dispose of the material collected according to regulations.

## 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.
- Keep away from heat and direct sunlight.
- Apply the general protective and hygienic measures when handling chemicals.

### Information about fire - and explosion protection:

- Traces of flammable substances may collect in the steam chamber of enclosed systems. Keep clear of ignition sources.
- Fumes can combine with air to form an explosive mixture.
- 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.
- Store only in the original receptacle.
- Information about storage in one common storage facility: Store away from oxidising agents.
- Further information about storage conditions:
  - Keep container tightly sealed.
  - Protect from heat and direct sunlight.
  - Store in cool, dry conditions in well sealed receptacles.

#### Storage class: 3

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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 Ethanol

WEL Long-term value: 1920 mg/m<sup>3</sup>, 1000 ppm

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

### 8.2 Exposure controls

- Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
- General protective and hygienic measures: Wash hands before breaks and at the end of work.
- Respiratory protection: Not necessary if room is well-ventilated.
- Hand protection
  - Solvent resistant gloves



Protective gloves

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

(Contd. on page 5)

E

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

**Trade name: Ethanol**

(Contd. of page 4)

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

- **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.

Butyl rubber, BR

Material thickness > 0.7 mm

- **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.

level 6 for application > 480 min

- **Eye/face protection**



Tightly sealed goggles

- **Body protection:**



Protective work clothing (e. g. safety shoes EN ISO 20345, long-sleeved protective working garments).

## SECTION 9: Physical and chemical properties

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

- **General Information**

- **Physical state**

Fluid

- **Colour:**

Colourless

- **Odour:**

Alcohol-like

- **Melting point/freezing point:**

-114 °C (Ethanol)

- **Boiling point or initial boiling point and boiling range**

78 °C (Ethanol)

- **Flammability**

Highly flammable.

- **Lower and upper explosion limit**

- **Lower:**

3.5 Vol %

- **Upper:**

15 Vol %

- **Flash point:**

13 °C (Ethanol)

- **Auto-ignition temperature:**

425 °C

- **Decomposition temperature:**

Not determined.

- **pH**

Not determined.

- **Viscosity:**

- **Kinematic viscosity**

Not determined.

- **Dynamic at 20 °C:**

1.2 mPas

- **Solubility**

- **water at 20 °C:**

1,000 g/l

- **Partition coefficient n-octanol/water (log value)**

Not determined.

- **Vapour pressure at 20 °C:**

59 hPa

- **Vapour pressure at 50 °C:**

280 hPa

- **Density and/or relative density**

- **Density at 20 °C:**

0.79 g/cm<sup>3</sup>

Not determined.

- **Relative density**

Not determined.

- **Vapour density**

Not determined.

(Contd. on page 6)

E

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 5)

## · 9.2 Other information

### · Appearance:

#### · Form:

Fluid

### · Important information on protection of health and environment, and on safety.

#### · Ignition temperature:

Not determined.

#### · Explosive properties:

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

#### · Molecular weight

46 g/mol

#### · Change in condition

#### · Evaporation rate

Not determined.

## · Information with regard to physical hazard classes

### · Explosives

Void

### · Flammable gases

Void

### · Aerosols

Void

### · Oxidising gases

Void

### · Gases under pressure

Void

### · Flammable liquids

Highly flammable liquid and vapour.

### · Flammable solids

Void

### · Self-reactive substances and mixtures

Void

### · Pyrophoric liquids

Void

### · Pyrophoric solids

Void

### · Self-heating substances and mixtures

Void

### · Substances and mixtures, which emit flammable gases in contact with water

Void

### · Oxidising liquids

Void

### · Oxidising solids

Void

### · Organic peroxides

Void

### · Corrosive to metals

Void

### · Desensitised explosives

Void

## SECTION 10: Stability and reactivity

### · 10.1 Reactivity

This is a reactive substance. Risk of ignition.

Vapours can form an explosive mixture with air.

When heated: Danger of ignition

### · 10.2 Chemical stability

Stable when stored and handled properly.

### · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

### · 10.3 Possibility of hazardous reactions

Forms explosive gas mixture with air.

### · 10.4 Conditions to avoid

Heat, flames and sparks.

### · 10.5 Incompatible materials:

Avoid contact with other chemicals.

### · 10.6 Hazardous decomposition products:

In case of fire: see section 5.

## SECTION 11: Toxicological information

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

#### · Acute toxicity

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

#### · LD/LC50 values relevant for classification:

Oral	LD50	7,060 mg/kg (rat)
Inhalative	LC50	20,000 mg/l (rat)

#### · Primary irritant effect:

#### · Skin corrosion/irritation

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

(Contd. on page 7)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 6)

- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **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** Based on available data, the classification criteria are not met.
- **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.
- **Subacute to chronic toxicity:** -
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**  
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **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.

## SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**  
Observe local (country-specific) regulations and laws.  
This product and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Chemicals must be disposed of in accordance with the respective national regulations.

### European waste catalogue

14 00 00	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08)
14 06 00	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 03*	other solvents and solvent mixtures
HP3	Flammable
HP4	Irritant - skin irritation and eye damage

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

(Contd. on page 8)

# Safety data sheet according to UK REACH

revised on: 26.11.2024



Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 7)

## SECTION 14: Transport information

· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1170
· 14.2 UN proper shipping name · ADR · IMDG · IATA	1170 ETHANOL (ETHYL ALCOHOL) ETHANOL (ETHYL ALCOHOL) ETHANOL
· 14.3 Transport hazard class(es) · ADR	
	
· Class · Label	3 (F1) Flammable liquids. 3
· IMDG, IATA	
	
· Class · Label	3 Flammable liquids. 3
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Flammable liquids. 33 F-E,S-D A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category · Tunnel restriction code	2 D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II

(Contd. on page 9)



# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 8)

## SECTION 15: Regulatory information

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

#### Inventory of Hazardous Chemicals

CAS: 64-17-5 | Ethanol

#### Poisons Act

Regulated explosives precursors Substance is not listed.

Regulated poisons Substance is not listed.

Reportable explosives precursors Substance is not listed.

Reportable poisons Substance is not listed.

#### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the GB CLP regulation.

#### Hazard pictograms



GHS02 GHS07

#### Signal word Danger

#### Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P243 Take action to prevent static discharges.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P403+P235 Store in a well-ventilated place. Keep cool.

#### Directive 2012/18/EU

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

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 40

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

Substance is not listed.

#### REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

Substance is not listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS Substance is not listed.

Regulation (EC) No 273/2004 on drug precursors Substance is not listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

Substance is not listed.

#### National regulations:

#### Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

(Contd. on page 10)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

**Trade name: Ethanol**

(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.

The application, use and processing of our products are beyond our control and are therefore exclusively your responsibility.

· **Department issuing SDS:** Product management

· **Contact:** Product management

· **Abbreviations and acronyms:**

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)

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

E

(Contd. on page 11)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 10)

## Annex: Exposure scenario

- **Short title of the exposure scenario**

Chemicals for laboratory and industry  
Fabric production  
Formulation or repackaging

- **Sector of Use**

Industrial use.  
SU8 Manufacture of bulk chemicals (including petroleum products)  
SU9 Manufacture of fine chemicals

- **Product category** PC21 Laboratory chemicals

- **Process category**

PROC 1 Chemical production or refining in a closed process with no probability of exposure or process with equivalent containment conditions.  
PROC 2 Chemical production or refining in a closed continuous process with occasional controlled exposure or process with equivalent containment conditions.  
PROC3 Production or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment conditions.  
PROC4 Chemical production with the possibility of exposure  
PROC5 Mixing in batch processes  
PROC8a Transfer of substances or mixtures (filling and discharging) in equipment not specifically designed for only one product  
PROC8b Transfer of substances or mixtures (filling and emptying) in dedicated equipment for one product only.  
PROC9 Transfer of a substance or mixture into small containers (special filling equipment, including weighing).  
PROC14 Tableting, pressing, extruding, pelletising, granulating  
PROC15 Use as laboratory reagent

- **Environmental release category**

ERC1 Manufacture of the substance  
ERC2 Formulation into a mixture  
ERC4 Use as a non-reactive processing aid at an industrial site (no inclusion in or on an article).  
ERC8a Wide use as non-reactive processing aid ( no inclusion in or on an article, indoor use).

- **Description of the activities / processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

- **Conditions of use**

According to directions for use.  
Customary application according to section 1.

- **Duration and frequency** 5 workdays/week.

- **Worker**

5 workdays/week.  
8hrs (full working shift).  
Long-term.

- **Environment** The product must not be released into the environment.

- **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**

Observe section 6 of the Safety Data Sheet (Accidental release measures).

- **Other operational conditions affecting worker exposure**

Take precautionary measures against static discharge.  
Keep away from sources of ignition - No smoking.  
Keep container tightly closed.  
Do not breathe gas/vapour/aerosol.

- **Other operational conditions affecting consumer exposure** Keep out of the reach of children.

- **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

(Contd. on page 12)

# Safety data sheet according to UK REACH

revised on: 26.11.2024

Version number 13

Creation Date: 19.01.2011

Trade name: Ethanol

(Contd. of page 11)

- **Risk management measures**

- **Worker protection**

- **Organisational protective measures**

Keep good industrial hygiene.

Ensure that activities are executed by specialists or authorised personnel only.

Deploy only trained chemical workers.

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.

For special applications, it is recommended to verify the chemical resistance of the above stated protective gloves with the manufacturer.

Provide sufficient washing facilities.

Work clothes must not consist of textiles that exhibit dangerous melting behaviour in case of fire.

- **Technical protective measures**

Carry out filling operations only at sites with extractors available.

The work process has to be performed under closed conditions.

Provide explosion-proof electrical equipment.

Ensure good ventilation/exhaustion at the workplace.

- **Personal protective measures**

Protective clothing

Selection of glove material considering breakthrough times, permeation rates and degradation.

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

Work with gloves. The protective gloves to be used must comply with the specifications of REGULATION (EU) 2016/425 and the resulting standard EN 374.

Due to lack of testing, no recommendation on glove material can be given for the product / preparation / chemical mixture.

Rubber gloves

Safety glasses

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

Detailed measures on hand protection according to Safety Data Sheet, section 8.

Do not inhale gases / fumes / aerosols.

- **Measures for consumer protection**

Ensure adequate labelling.

Keep locked up and out of the reach of children.

- **Environmental protection measures**

- **Water** Do not allow to reach sewage system.

- **Soil** Prevent contamination of soil.

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

- **Disposal measures**

Disposal must be made according to official regulations.

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 maximum expected dermal exposure is 0.34 mg/kg/day.

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

- **Worker (inhalation)**

The highest expected inhalation exposure is 10 ppm.

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

- **Environment**

The highest expected environmental exposure in the treatment plant is 0.00533 mg/L.

The highest expected environmental exposure is 0.00291 mg/L for surface water.

The highest expected environmental exposure to soil is 0.00162 mg/kg wet weight.

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

- **Guidance for downstream users**

For the risk assessment, the tools recommended by ECHA can be used.

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