

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

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

- **1.1 Product identifier**
- **Trade name:** *Ethoxypropanol*
- **Chemical Identification:** *1-Ethoxypropan-2-ol*
- **Article number:** 460
- **CAS Number:**  
1569-02-4
- **EC number:**  
216-374-5
- **Index number:**  
603-177-00-8
- **Registration number** 01-2119462792-32
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*
- **Application of the substance / the mixture** *Solvent for various applications*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Möller Chemie GmbH & Co. KG*  
*Bürgerkamp 1*  
*D-48565 Steinfurt*  
*Tel.: 02551/9340-0*  
*Fax: 02551/9340-60*
- **Further information obtainable from:** *Product safety department*
- **1.4 Emergency telephone number:**  
*Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240*

## SECTION 2: Hazards identification

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



GHS02 flame

*Flam. Liq. 3 H226 Flammable liquid and vapour.*



GHS07

*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

- **Signal word** *Warning*
- **Hazard statements**  
*H226 Flammable liquid and vapour.*  
*H319 Causes serious eye irritation.*  
*H336 May cause drowsiness or dizziness.*

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

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Version number 1

Revision: 16.03.2023

**Trade name: Ethoxypropanol**

(Contd. of page 1)

**Precautionary statements**

- P210** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P241** Use explosion-proof [electrical/ventilating/lighting] equipment.
- P303+P361+P353** IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405** Store locked up.
- P501** Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards**

The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 at levels of 0.1% or more have endocrine disrupting properties.

**Results of PBT and vPvB assessment****PBT:**

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

**vPvB:**

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

### SECTION 3: Composition/information on ingredients

**3.1 Substances****CAS No. Description**

1569-02-4 1-ethoxypropan-2-ol

**Identification number(s)**

**EC number:** 216-374-5

**Index number:** 603-177-00-8

**Additional information:**

Contains:

CAS No.: 19089-47-5 2-Ethoxy-1-propanol < 3.0 %

### SECTION 4: First aid measures

**4.1 Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Rinse out mouth and then drink plenty of water.

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

Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Signs and symptoms of respiratory irritation may include a transient burning sensation in the nose and throat, coughing, and/or shortness of breath. Inhalation of high vapor concentrations can cause central nervous system (CNS) depression, resulting in dizziness, lightheadedness, headache, nausea and incoordination. Prolonged inhalation can result in unconsciousness or death.

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

Causes central nervous system depression. Consult a doctor or poison control center for information.

### SECTION 5: Firefighting measures

**5.1 Extinguishing media**

- **Suitable extinguishing agents:** CO<sub>2</sub>, powder or water spray. Fight larger fire with alcohol resistant foam.

(Contd. on page 3)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

**Trade name: Ethoxypropanol**

(Contd. of page 2)

- **5.2 Special hazards arising from the substance or mixture**  
*Specific hazards during firefighting : Vapors are heavier than air and will spread along floors. Inflammation possible over a greater distance. Carbon monoxide may be released in the event of incomplete combustion.*
- **5.3 Advice for firefighters**  
*Persons must wear appropriate personal protective equipment including chemical resistant gloves. If there is a risk of widespread contact from spilled material, a chemical protective suit must be worn.*
- **Protective equipment:** *Wear self-contained respiratory protective device.*
- **Additional information** *Cool endangered receptacles with water spray.*

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
*Wear protective equipment. Keep unprotected persons away.*
- **6.2 Environmental precautions:**  
*Do not allow to enter sewers/ surface or ground water.  
Closing leaks without taking any personal risks. Eliminate all possible sources of ignition in the surrounding area. Use appropriate containment facilities to prevent environmental contamination. Prevent spreading or leakage into drains, ditches or rivers by using sand, earth or other suitable barrier. Attempt to knock down fumes or direct them to a safe place, for example using a water spray jet. Take precautionary measures against static discharge. Ensure electrical current flow by grounding and earthing all devices. Ventilate affected areas thoroughly. Monitor area with a sensor that indicates combustible gases.*
- **6.3 Methods and material for containment and cleaning up:**  
*Large quantities of leaked liquid (> 1 barrel) are to be picked up, for example, with the help of a vacuum truck and sent for recycling or safe disposal. Do not wash away residue with water. Collect as contaminated waste. Pick up residues with a suitable absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. Collect small amounts of spilled liquid (< 1 drum) and place in a closable, labeled container for recycling or safe disposal. Pick up residues with a suitable absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.*
- **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**  
*Ensure good ventilation/exhaustion at the workplace.  
Glycol ethers can form peroxides.*
- **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**  
*Packaging material : Suitable material: Use mild steel or stainless steel for containers or container liners.  
Unsuitable material: natural, butyl, nitrile or neoprene rubber. Unsuitable material: aluminium, most plastics.*
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
*Vapor is heavier than air. Beware of accumulations in pits and narrow spaces.*
- **Information about storage in one common storage facility:** *Not known.*
- **Further information about storage conditions:**  
*Glycol ethers can form peroxides.  
Keep container tightly sealed.*
- **Storage class:**  
3  
flammable

(Contd. on page 4)

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

Trade name: *Ethoxypropanol*

(Contd. of page 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:** Not required.· **DNELs**

workers:

*Inhalation - acute - systemic effects:* 466 mg/m<sup>3</sup>*Inhalation - Long-term systemic effects:* 211 mg/m<sup>3</sup>*Dermal - long-term systemic effects:* 74 mg/kg body weight/day

Consumer:

*Inhalation - acute - systemic effects:* 300 mg/m<sup>3</sup>*Inhalation - Long-term systemic effects:* 127 mg/m<sup>3</sup>*Oral - Long-term systemic effects:* 14 mg/kg body weight/day· **PNECs***Water:* 10 mg/l*Sediment:* 37.6 mg/kg*Soil:* 2.4 mg/kg*Sewage treatment plant:* 1250 mg/l· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **Appropriate engineering controls** No further data; see item 7.· **Individual protection measures, such as personal protective equipment**· **General protective and hygienic measures:***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.**Immediately remove all soiled and contaminated clothing*· **Respiratory protection:** Suitable respiratory protective device recommended.· **Hand protection**

Protective gloves

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*· **Material of gloves***PVC gloves**Nitrile rubber, NBR**Butyl rubber, BR**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.*· **Eye/face protection**

Tightly sealed goggles

· **Body protection:** Protective work clothing

EU

(Contd. on page 5)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

Trade name: Ethoxypropanol

(Contd. of page 4)

## SECTION 9: Physical and chemical properties

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

#### · General Information

· Colour:	Colourless
· Odour:	Ether-like
· Odour threshold:	No data available
· Melting point/freezing point:	<-70 °C
· Boiling point or initial boiling point and boiling range	129 - 136 °C
· Lower and upper explosion limit	
· Lower:	1.3 Vol %
· Upper:	12 Vol %
· Flash point:	40 °C (PMCC / ASTM D3278)
· Ignition temperature:	255 °C
· Decomposition temperature:	No data available
· pH	No data available
· Viscosity:	
· Kinematic viscosity	No data available.
· Dynamic at 20 °C:	2.21 mPas (ASTM D445 )
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	< 1 log POW
· Vapour pressure at 20 °C:	12 hPa
· Density and/or relative density	
· Density at 20 °C:	ca. 0.897 g/cm <sup>3</sup>
· Relative density at 20 °C	0.91

### · 9.2 Other information

· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Change in condition	
· Evaporation rate	0.5

### · Information with regard to physical hazard classes

· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	
· 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

(Contd. on page 6)

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

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

**Trade name: Ethoxypropanol**

(Contd. of page 5)

· **Desensitised explosives**

Void

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
hygroscopic  
Reactions with strong oxidizing agents.
- **10.4 Conditions to avoid**  
Avoid heat, sparks, open flames and other sources of ignition. Prevent vapor build-up. Under certain circumstances, the product can ignite due to static electricity. Long-term exposure to air or moisture.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:**  
Thermal decomposition is highly dependent on certain conditions. A complex mixture of air pollutant solids, liquids and gases, including carbon monoxide, carbon dioxide, sulfur oxides and unidentified organic compounds, is formed when this material undergoes combustion or thermal or oxidative decomposition.

### 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:**

Dermal	LD50	9.500 mg/kg (rab)
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- **Skin corrosion/irritation** Slight irritant effect possible - does not require labeling.
- **Serious eye damage/irritation** Low irritation possible - not required for identification.
- **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**  
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.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**  
Toxicity to fish (Acute toxicity) : LC50 : > 100 mg/l  
Remarks: Practically non-toxic: based on available data, the classification criteria are not met.  
Toxic to crustaceans (Acute toxicity): EC50 : > 100 mg/l  
Remarks: Practically non-toxic: based on available data, the classification criteria are not met.  
Toxic to algae/aquatic plants (Acute toxicity) : EC50 : > 100 mg/l  
Remarks: Virtually non-toxic.  
Toxicity to fish (Chronic toxicity): Remarks: NOEC/NOEL > 100 mg/l  
Toxic to crustaceans (Chronic toxicity): Remarks: NOEC/NOEL > 100 mg/l  
Toxic to microorganisms (Acute toxicity) : IC50 : > 100 mg/l  
Remarks: Practically non-toxic: based on available data, the classification criteria are not met.
- **12.2 Persistence and degradability** Easily biodegradable
- **12.3 Bioaccumulative potential** Keine wesentliche Bioakkumulation

(Contd. on page 7)



# Safety data sheet

## according to 1907/2006/EC, Article 31

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Version number 1

Revision: 16.03.2023

**Trade name: Ethoxypropanol**



(Contd. of page 6)

- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** The product is not considered to be persistent, bioaccumulating nor toxic (PBT).
- **vPvB:** The product is not considered to be persistent or very bioaccumulative (vPvB).
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **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**
- **Recommendation** Disposal according to local regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 UN number or ID number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | UN3271  |
| <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>  | 3271 ETHERS, N.O.S. (1-ethoxypropan-2-ol)<br>ETHERS, N.O.S. (1-ethoxypropan-2-ol) |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul>  |   |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> | 3 (F1) Flammable liquids.<br>3  |
| <ul style="list-style-type: none"> <li>· <b>IMDG, IATA</b></li> </ul>   |   |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> | 3 Flammable liquids.<br>3   |
| <ul style="list-style-type: none"> <li>· <b>14.4 Packing group</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | III   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> </ul>  | No  |
| <ul style="list-style-type: none"> <li>· <b>14.6 Special precautions for user</b></li> <li>· <b>Hazard identification number (Kemler code):</b></li> <li>· <b>Stowage Category</b></li> </ul>                         | Warning: Flammable liquids.<br>30<br>A  |
| <ul style="list-style-type: none"> <li>· <b>14.7 Maritime transport in bulk according to IMO instruments</b></li> </ul>   | Not applicable.   |

(Contd. on page 8)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 16.03.2023

Version number 1

Revision: 16.03.2023

**Trade name: Ethoxypropanol**

(Contd. of page 7)

**· Transport/Additional information:****· ADR****· Limited quantities (LQ)**

5L

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**· Transport category**

3

**· Tunnel restriction code**

D/E

**· IMDG****· Limited quantities (LQ)**

5L

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**· UN "Model Regulation":**UN 3271 ETHERS, N.O.S. (1-ETHOXYPROPAN-2-OL),  
3, III**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 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.

**· 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:** Product safety department**· Contact:** Mrs. Steyer**· 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

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

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

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

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3