

SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

Catalogue No. 807291
Product name Ethylene glycol monophenyl ether for synthesis

Hazard statements

H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Precautionary statements

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

Reduced labelling (≤125 ml)



Hazard pictograms



Signal word
Warning

Index-No. 603-098-00-9

Labelling (67/548/EEC or 1999/45/EC)

<i>Symbol(s)</i>	 Xn	Harmful
<i>R-phrase(s)</i>	22-36	Harmful if swallowed. Irritating to eyes.
<i>S-phrase(s)</i>	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<i>EC-No.</i>	204-589-7	EC Label
Reduced labelling (≤125 ml)		
<i>Symbol(s)</i>	 Xn	Harmful
<i>R-phrase(s)</i>	22	Harmful if swallowed.

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula	C ₆ H ₅ OCH ₂ CH ₂ OH	C ₈ H ₁₀ O ₂ (Hill)
CAS-No.	122-99-6	
Index-No.	603-098-00-9	
EC-No.	204-589-7	
Molar mass	138,16 g/mol	

SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

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4.2 Most important symptoms and effects, both acute and delayed

irritant effects, Cough, Shortness of breath

The following applies to ethers in general: the uptake of large quantities is followed by narcosis, cardiovascular disorders. Nausea and vomiting after swallowing.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Carbon dioxide (CO₂), Foam, Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Combustible material, Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapours, aerosols. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7.2 and 10.5).

Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Observe label precautions.

7.2 Conditions for safe storage, including any incompatibilities

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Tightly closed.

Store at +15°C to +25°C.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material:	polychloroprene
Glove thickness:	0,65 mm
Break through time:	> 480 min

splash contact:

Glove material:	natural latex
Glove thickness:	0,6 mm
Break through time:	> 30 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 720 Camapren® (full contact), KCL 706 Lapren® (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet (>,<) supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment

protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds

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The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	weakly aromatic
Odour Threshold	No information available.
pH	ca. 7 at 10 g/l 23 °C
Melting point	ca. 13 °C
Boiling point/boiling range	244 - 250 °C at 1.013 hPa
Flash point	ca. 121 °C DIN 51758
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	1,4 %(V)
Upper explosion limit	9,0 %(V)
Vapour pressure	0,04 hPa at 20 °C
Relative vapour density	4,77
Relative density	1,11 g/cm ³ at 20 °C
Water solubility	24 g/l at 20 °C
Partition coefficient: n-octanol/water	log Pow: 1,16 (experimental) (Lit.) Bioaccumulation is not expected.

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Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	30 mPa.s at 20 °C
Explosive properties	No information available.
Oxidizing properties	No information available.

9.2 Other data

Ignition temperature	535 °C DIN 51794
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SECTION 10. Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.
Formation of peroxides possible.

10.2 Chemical stability

Sensitive to air.

10.3 Possibility of hazardous reactions

Violent reactions possible with:
Oxidizing agents, Acid anhydrides

10.4 Conditions to avoid

Strong heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

Peroxides

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

LD50 rat: 1.850 mg/kg (Lit.)

absorption

Acute inhalation toxicity

Symptoms: Possible damages:, Irritation symptoms in the respiratory tract.

Acute dermal toxicity

LD50 rabbit: > 2.000 mg/kg (External MSDS)

absorption

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Skin irritation

rabbit

Result: No irritation

OECD Test Guideline 404

Eye irritation

rabbit

Result: Eye irritation

OECD Test Guideline 405

Causes serious eye irritation.

Sensitisation

Patch test: human

Result: negative

(IUCLID)

Sensitisation test: guinea pig

Result: negative

Method: OECD Test Guideline 406

Genotoxicity in vivo

Mutagenicity (mammal cell test): micronucleus.

Result: negative

(IUCLID)

Genotoxicity in vitro

Ames test

Result: negative

(IUCLID)

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2 Further information

After absorption:

We have no description of any toxic symptoms.

Other information

The following applies to ethers in general: the uptake of large quantities is followed by narcosis, cardiovascular disorders. Nausea and vomiting after swallowing.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

12.1 Toxicity

Toxicity to fish

LC50 *Leuciscus idus* (Golden orfe): 220 - 460 mg/l; 96 h (IUCLID)

Toxicity to daphnia and other aquatic invertebrates.

EC50 *Daphnia magna* (Water flea): > 500 mg/l; 48 h (IUCLID)

Toxicity to algae

IC50 *Desmodesmus subspicatus* (green algae): > 500 mg/l; 72 h (IUCLID)

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Toxicity to bacteria

EC10 activated sludge: 320 mg/l; 17 h
OECD Test Guideline 209

12.2 Persistence and degradability

Biodegradability

Easily eliminable.

82 %; 17 d
OECD Test Guideline 302B

90 - 100 %; 15 d
OECD Test Guideline 301A

Chemical Oxygen Demand (COD)

2,127 mg/g

Theoretical oxygen demand (ThOD)

2.200 mg/g

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 1,16
(experimental)
(Lit.) Bioaccumulation is not expected.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Additional ecological information

Do not allow to run into surface waters, wastewater, or soil.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard 96/82/EC
Legislation Directive 96/82/EC does not apply

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.

Storage class 10

15.2 Chemical Safety Assessment

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For this product a chemical safety assessment was not carried out.

SECTION 16. Other information

Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.
H319 Causes serious eye irritation.

Full text of R-phrases referred to under sections 2 and 3

R22 Harmful if swallowed.
R36 Irritating to eyes.

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.