

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 1 of 9

**1. Identification****Product identifier**

MEG, Monoethylenglykol

**Recommended use of the chemical and restrictions on use****Use of the substance/mixture**

Coolant

**Uses advised against**

Any non-intended use.

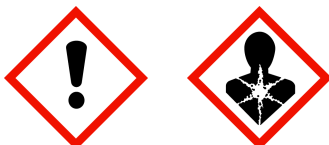
**Details of the supplier of the safety data sheet**

Company name: Huber USA Inc.  
Street: 1101 Nowell Rd Suite 110  
Place: USA-NC 27607 Raleigh  
Telephone: 800-726-4877  
e-mail: info@huber-online.com  
Internet: www.huber-usa.com

**Emergency phone number:** Toll Free: 1-800-424-9300; Local: +1-703-527-3887**2. Hazard(s) identification****Classification of the chemical****29 CFR Part 1910.1200**

Acute toxicity: Acute Tox. 4 (oral)

Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

**Label elements****29 CFR Part 1910.1200****Signal word:** Warning**Pictograms:****Hazard statements**

Harmful if swallowed

May cause damage to organs through prolonged or repeated exposure

**Precautionary statements**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dust/fume/gas/mist/vapors/spray.

Do not eat, drink or smoke when using this product.

If swallowed: Call a poison center/doctor if you feel unwell.

Rinse mouth.

Get medical advice/attention if you feel unwell.

Dispose of contents/container to local/regional/national/international regulations.

**Hazards not otherwise classified**

The components in this formulation (&gt;0,1%) do not meet the criteria for classification as PBT or vPvB.

**3. Composition/information on ingredients****Mixtures**

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 2 of 9

**Hazardous components**

CAS No	Components	Quantity
107-21-1	ethanediol; ethylene glycol	50 - 100 %

**4. First-aid measures****Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**After inhalation**

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

**After contact with skin**

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment. Take off immediately all contaminated clothing.

**After contact with eyes**

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

Irritant effect on skin, eyes and respiratory organs; headache, drowsiness; Nausea; dizziness; balance disorders; Unconsciousness.

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

Maintain good diuresis; monitor renal function, electrolyte and acid-base balance. Early administration of ethanol may counteract the toxicity of ethylene glycol (metabolic acidosis and renal damage). Supportive measures required. Treatment depends on physician's assessment and patient's condition.

**5. Fire-fighting measures****Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>) Dry extinguishing powder. alcohol resistant foam. Atomized water.

**Unsuitable extinguishing media**

High power water jet.

**Specific hazards arising from the chemical**

Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO).

**Special protective equipment and precautions for fire-fighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

**6. Accidental release measures****Personal precautions, protective equipment and emergency procedures****General advice**

See protective measures under point 7 and 8.

# Safety Data Sheet

according to 29 CFR 1910.1200(g)

## MEG, Monoethylenglykol

Revision date: 09/29/2020

Product code:

Page 3 of 9

### For non-emergency personnel

Wear personal protection equipment (refer to section 8).

### For emergency responders

No special measures are necessary.

### Environmental precautions

Discharge into the environment must be avoided.

### Methods and material for containment and cleaning up

#### For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

#### For cleaning up

Clean contaminated objects and areas thoroughly observing environmental regulations.

### Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## 7. Handling and storage

### Precautions for safe handling

#### Advice on safe handling

Wear personal protection equipment (refer to section 8).

Handle and open container with care. Do not breathe fume/ mist/ vapors. Vapors / aerosols should be extracted by suction directly at point of origin.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Take precautionary measures against static discharges.

#### Advice on general occupational hygiene

Always close containers tightly after the removal of product. Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and after work.

#### Further information on handling

General protection and hygiene measures: See section 8.

### Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

#### Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Acid. Radioactive substances.

Infectious substances. Food and animal feedingstuff.

#### Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

## 8. Exposure controls/personal protection

### Control parameters

#### Additional advice on limit values

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

### Exposure controls

## Safety Data Sheet

according to 29 CFR 1910.1200(g)

### MEG, Monoethylenglykol

Revision date: 09/29/2020

Product code:

Page 4 of 9



#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). Standards: EN 166 or 29 CFR 1910.133

##### Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of the glove material 0,4 mm

Breakthrough time  $\geq$  8 h

Butyl rubber. - Thickness of the glove material 0,5 mm

Breakthrough time  $\geq$  8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of the glove material 0,5 mm

Breakthrough time  $\geq$  8 h

NBR (Nitrile rubber). - Thickness of the glove material 0,35 mm

Breakthrough time  $\geq$  8 h

PVC (Polyvinyl chloride). - Thickness of the glove material 0,5 mm

Breakthrough time  $\geq$  8 h

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The selected protective gloves should satisfy the specifications of standards like EN 374.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

##### Skin protection

Suitable protective clothing: Lab apron.

##### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required. Respiratory protection necessary at: Insufficient ventilation: Particulate Respirators, Standard: 42 CFR Part 84 or DIN 143.

##### Environmental exposure controls

No special precautionary measures are necessary.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state:	liquid
Color:	light yellow
Odor:	hardly noticeable

### Test method

#### Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	~ 165 °C
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 5 of 9

Flash point: 119 °C

**Explosive properties**

none

Lower explosion limits: 3 vol. %

Upper explosion limits: not determined

Auto-ignition temperature: 410 °C

**Self-ignition temperature**

Gas: not determined

Decomposition temperature: 260 °C

pH-Value: 7,7 - 8,3

Viscosity / dynamic:  
(at 20 °C) ~ 26 mPa·s

Viscosity / kinematic: not determined

Flow time: not determined

Water solubility: completely miscible

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: SECTION 12: Ecological information

Vapor pressure:  
(at 20 °C) < 0,1 hPaDensity (at 20 °C): 1,13 g/cm<sup>3</sup> DIN 51757

Relative vapour density: not determined

**Other information****Information with regard to physical hazard classes**

Sustaining combustion: Not sustaining combustion

Oxidizing properties  
none**Other safety characteristics**

Solvent separation test: not determined

Solvent content: not determined

Solid content: not determined

Evaporation rate: not determined

**Further Information****10. Stability and reactivity****Reactivity**

No information available.

**Chemical stability**

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.

**Possibility of hazardous reactions**

Hazardous reactions: Will not occur

No information available.

**Conditions to avoid**

storage temperature: &gt; 350°C

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 6 of 9

Protect against: UV-radiation/sunlight. heat.

**Incompatible materials**

Materials to avoid: Oxidising agent, strong. Acid.

**Hazardous decomposition products**Can be released in case of fire: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).**11. Toxicological information****Route(s) of Entry**

Ingestion: May be harmful if swallowed. Inhalation: May be harmful if inhaled. Skin contact: May cause irritation. Eye contact: May cause irritation.

**Information on toxicological effects****Toxicokinetics, metabolism and distribution**

No data available.

**Acute toxicity**

Harmful if swallowed

**ATEmix calculated**

ATE (oral) 500,0 mg/kg

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	LD50 mg/kg	7712	Rat.	ECHA Dossier
	dermal	LD50 mg/kg	>5000	Rabbit	RTECS

**Irritation and corrosivity**

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

**Sensitizing effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

**Specific target organ toxicity (STOT) - single exposure**

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

**Specific target organ toxicity (STOT) - repeated exposure**

May cause damage to organs through prolonged or repeated exposure (ethanediol; ethylene glycol)

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

**Aspiration hazard**

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

**Specific effects in experiment on an animal**

No data available.

**Information on other hazards****Endocrine disrupting properties**

No data available.

**12. Ecological information****Ecotoxicity**

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 7 of 9

The product has not been tested.

**Persistence and degradability**

The product has not been tested.

**Bioaccumulative potential**

No indication of bioaccumulation potential.

**Mobility in soil**

No data available.

**Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

**Other adverse effects**

No data available.

**Further information**

Do not allow to enter into surface water or drains.

**13. Disposal considerations****Waste treatment methods****Disposal recommendations**

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

**RCRA Hazardous wastes (Resource Conservation and Recovery Act)**

None

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.

**14. Transport information****U.S. DOT 49 CFR 172.101****Proper shipping name:**

Not a hazardous material with respect to these transport regulations. &&  
Not controlled under DOT

**Marine transport (IMDG)****UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)****UN number or ID number:**

No dangerous good in sense of this transport regulation.

**UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**Packing group:**

No dangerous good in sense of this transport regulation.

**Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**Special precautions for user**

See section 8.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not relevant

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 8 of 9

**15. Regulatory information****U.S. Regulations****National Inventory TSCA**

ethanediol; ethylene glycol listed in the TSCA inventory 8 (b): (x) active,  
ethanediol; ethylene glycol not listed under TSCA 12(b)

**National regulatory information**

SARA Section 304 CERCLA:

Ethylene glycol (107-21-1): Reportable quantity = 5,000 (2270) lbs. (kg)

SARA Section 311/312 Hazards:

Ethylene glycol (107-21-1): Immediate (acute) health hazard, Delayed (chronic) health hazard

SARA Section 313 Toxic release inventory:

Ethylene glycol (107-21-1): De minimis limit = 1.0 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Ethylene glycol (107-21-1)

**State Regulations****Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

WARNING: This product can expose you to chemicals including Ethylene glycol (ingested) (developmental), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

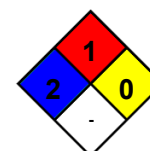
This preparation is hazardous in the sense of regulation 29 CFR Part 1910.1200.

**16. Other information****Hazardous Materials Information Label (HMIS)**

Health:	2
Flammability:	1
Physical Hazard:	0
Personal Protection:	B

**NFPA Hazard Ratings**

Health:	2
Flammability:	1
Reactivity:	0
Unique Hazard:	-

**Changes**

Revision date:	29.09.2020
Revision No:	1,0
Rev. 1.0; Initial release:	29.09.2020

**Abbreviations and acronyms**

ACGIH: American Conference of Governmental Industrial Hygienists  
 ASTM: American Society for Testing and Materials.  
 ATE: acute toxicity estimate  
 BCF: Bio concentration factor  
 ECHA: European Chemicals Agency  
 CAS: Chemical Abstracts Service  
 CFR: Code of Federal Regulations  
 DOT: Department of Transportation  
 d: days  
 EC50: Half maximal effective concentration  
 EN: European Norm  
 EPA: Environmental Protection Agency



**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

**MEG, Monoethylenglykol**

Revision date: 09/29/2020

Product code:

Page 9 of 9

GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
h: hours  
HMIS: Hazardous Materials Identification System  
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
IBC: Intermediate Bulk Container  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
LOAEL: Lowest observed adverse effect level  
LOAEC: Lowest observed adverse effect concentration  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
MARPOL: marine pollution  
NOAEL: No observed adverse effect level  
NOAEC: No observed adverse effect concentration  
NTP: National Toxicology Program  
N/A: not applicable  
NFPA: National Fire Protection Association  
UN: United Nations  
OECD: Organisation for Economic Co-operation and Development  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent bioaccumulative toxic  
RTECS: Registry of Toxic Effects of Chemical Substances  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
SARA: Superfund Amendments and Reauthorization Act  
STEL: short-term exposure limits  
TSCA: Toxic Substances Control Act  
TWA: time weighted average  
VOC: Volatile Organic Compounds

**Other data**

Classification according 29 CFR Part 1910.1200: - Classification procedure:  
Health hazards: Calculation method.  
Environmental hazards: Calculation method.  
Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*