

**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

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

**1.1 Product identifier**

Identification of the substance **Propane-1,2-diol**  
 CAS number 57-55-6  
 Alternative name(s) propane-1,2-diol  
 Article number A0001146

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

Relevant identified uses General use

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

Chemos GmbH & Co. KG  
 Sonnenring 7  
 84032 Altdorf  
 Germany

Telephone: +49 871-966346-0  
 Telefax: +49 871-966346-13  
 e-mail: chemos@chemos.de  
 Website: <http://www.chemos.de/>

e-mail (competent person) chemos@chemos.de

**1.4 Emergency telephone number**

Emergency information service +49 89 1 92 40

Poison centre				
Country	Name	Postal code/ city	Telephone	Telefax
United Kingdom	National Poison Information Centre Medical Toxicology Unit	SE14 5ER Lon- don	+44 171 635 91 91	

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Classification acc. to GHS  
 This substance does not meet the criteria for classification.

**2.2 Label elements**

Labelling  
 not required

**2.3 Other hazards**

of no significance

**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Name of substance	Propane-1,2-diol
Identifiers	
CAS No	57-55-6
EC No	200-338-0
Molecular formula	C3H8O2

**SECTION 4: First aid measures****4.1 Description of first aid measures**

## General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

## Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

## Following skin contact

Wash with plenty of soap and water.

## Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

## Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

## Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

## Unsuitable extinguishing media

Water jet

**5.2 Special hazards arising from the substance or mixture**

## Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## Propane-1,2-diol

Version number: GHS 1.0

Date of compilation: 2023-04-25

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

#### 7.3 Specific end use(s)

See section 16 for a general overview.

**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Occupational exposure limit values (Workplace Exposure Limits)  
this information is not available

**Environmental values**

Relevant PNECs and other threshold levels				
Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
PNEC	260 mg/l	aquatic organisms	freshwater	short-term (single instance)
PNEC	26 mg/l	aquatic organisms	marine water	short-term (single instance)
PNEC	20,000 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
PNEC	572 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
PNEC	57.2 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
PNEC	50 mg/kg	terrestrial organisms	soil	short-term (single instance)

**8.2 Exposure controls**

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

**SECTION 9: Physical and chemical properties**

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

Physical state	liquid
Colour	colourless
Odour	characteristic
Melting point/freezing point	<-20 °C at 101.3 Pa
Boiling point or initial boiling point and boiling range	184 °C at 100.3 kPa
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	104 °C at 100 kPa
Auto-ignition temperature	>400 °C at 101.4 kPa (ECHA)
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not determined
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	-1.07 (20.5 °C) (ECHA)
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Vapour pressure	20 Pa at 25 °C
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Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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**9.2 Other information**

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
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**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

## Other safety characteristics

Surface tension	71.6 mN/m (21.5 °C) (ECHA)
Liquid content	100 %

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

**10.2 Chemical stability**

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid**

There are no specific conditions known which have to be avoided.

**10.5 Incompatible materials**

Oxidisers

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Classification acc. to GHS**

This substance does not meet the criteria for classification.

## Acute toxicity

Shall not be classified as acutely toxic.

## Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

## Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

## Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

## Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

## Carcinogenicity

Shall not be classified as carcinogenic.

## Reproductive toxicity

Shall not be classified as a reproductive toxicant.

## Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

**Propane-1,2-diol**

Version number: GHS 1.0

Date of compilation: 2023-04-25

Specific target organ toxicity - repeated exposure  
Shall not be classified as a specific target organ toxicant (repeated exposure).  
Aspiration hazard  
Shall not be classified as presenting an aspiration hazard.

**11.2 Information on other hazards**

There is no additional information.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Shall not be classified as hazardous to the aquatic environment.

**12.2 Persistence and degradability**

Process of degradability		
Process	Degradation rate	Time
oxygen depletion	106.8 %	28 d
carbon dioxide generation	81.7 %	28 d
DOC removal	98.3 %	28 d

**12.3 Bioaccumulative potential**

Data are not available.

n-octanol/water (log KOW)	-1.07 (20.5 °C) (ECHA)
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**12.4 Mobility in soil**

Data are not available.

**12.5 Results of PBT and vPvB assessment**

Data are not available.

**12.6 Endocrine disrupting properties**

Information on this property is not available.

**12.7 Other adverse effects**

Data are not available.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Sewage disposal-relevant information  
Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

**Waste treatment of containers/packagings**

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## Propane-1,2-diol

Version number: GHS 1.0

Date of compilation: 2023-04-25

### SECTION 14: Transport information

- 14.1 UN number or ID number** not assigned
- 14.2 UN proper shipping name** not assigned
- 14.3 Transport hazard class(es)** none
- 14.4 Packing group** not assigned
- 14.5 Environmental hazards** non-environmentally hazardous acc. to the dangerous goods regulations
- 14.6 Special precautions for user**  
Provisions for dangerous goods (ADR) should be complied within the premises.
- 14.7 Maritime transport in bulk according to IMO instruments**  
The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

not assigned

##### International Maritime Dangerous Goods Code (IMDG) - Additional information

not assigned

##### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

not assigned

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Relevant provisions of the European Union (EU)**
- Deco-Paint Directive**
- |             |       |
|-------------|-------|
| VOC content | 100 % |
|-------------|-------|
- Industrial Emissions Directive (IED)**
- |             |       |
|-------------|-------|
| VOC content | 100 % |
|-------------|-------|
- 15.2 Chemical safety assessment**  
No Chemical Safety Assessment has been carried out for this substance.

### SECTION 16: Other information

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)



## Propane-1,2-diol

Version number: GHS 1.0

Date of compilation: 2023-04-25

Abbr.	Descriptions of used abbreviations
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.