

# Safety Data Sheet

according to Regulation (EC) No 1907/2006



## GLYKOSOL N

Revision date: 22.06.2017

Product code: 11386-0003

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

#### 1.1. Product identifier

GLYKOSOL N

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

##### Use of the substance/mixture

Various

#### 1.3. Details of the supplier of the safety data sheet

Company name: pro Kühlsole GmbH  
Street: Am Langen Graben 37  
Place: D-52353 Düren  
Telephone: +49 2421 59196-0  
Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de  
Telefax: +49 2421 59196-10

#### 1.4. Emergency telephone

number:

Notrufnummer INTERNATIONAL: +49 (0) 6132 / 84463 (GBK GmbH, Ingelheim)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Harmful if swallowed.

May cause damage to organs (kidney, oral) through prolonged or repeated exposure.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

ethanediol, ethylene glycol

Signal word: Warning

Pictograms:



##### Hazard statements

H302 Harmful if swallowed.

H373 May cause damage to organs (kidney, oral) through prolonged or repeated exposure.

##### Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.

P314 Get medical advice/attention if you feel unwell.

P501 Dispose of contents/container to hazardous or special waste collection point.

##### Additional advice on labelling

The product is labeled in accordance with Regulation (EC) no. 1272/2008 (GHS).

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### 2.3. Other hazards

High risk of slipping due to leakage/spillage of product.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of the following substances with non-hazardous admixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
107-21-1	ethanediol, ethylene glycol			95 - < 100 %
	203-473-3		01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated soaked clothing immediately. In the event of persistent symptoms receive medical treatment.

#### After inhalation

Move to fresh air in case of accidental inhalation of vapours. In the event of symptoms refer for medical treatment.

#### After contact with skin

Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists.

#### After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

#### After ingestion

Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Seek medical treatment immediately. Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause damage to organs through prolonged or repeated exposure. (kidney, oral)  
Harmful if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.

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### Unsuitable extinguishing media

Full water jet.

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

Fire may produce: carbon monoxide and carbon dioxide Under certain fire conditions traces of other toxic substances cannot be excluded. Vapours may form explosive mixture with air.

### **5.3. Advice for firefighters**

Cool containers at risk with water spray jet. Use breathing apparatus with independent air supply. Wear full protective suit. Suppress escaping gasses/vapours with directed water spray jet.

### **Additional information**

Collect contaminated fire-fighting water, avoid any release into the sewerage. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

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

In case of vapour formation use respirator. Ensure adequate ventilation. Avoid contact with eyes, skin or mucous membrane. Use personal protective clothing.

### **6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.

### **6.4. Reference to other sections**

Information for disposal see section 13.

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Use only in thoroughly ventilated areas. Avoid contact with eyes, skin or mucous membrane. Care for thoroughly room ventilation, if necessary suck off at workplace.

#### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take measures against electrostatically charging. Vapours can form an explosive mixture with air.

#### **Further information on handling**

Avoid formation of aerosols. Do not inhale vapour/aerosol.. In case of insufficient ventilation, especially in confined areas.

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

#### **Requirements for storage rooms and vessels**

Store only in original container at cool and aired place.  
Keep in a dry place.

#### **Advice on storage compatibility**

Keep away from food, drink and animal feeding stuffs.

#### **Further information on storage conditions**

Keep container tightly closed.

### **7.3. Specific end use(s)**

No data available.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

#### 8.2. Exposure controls



##### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

##### Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Take off immediately all contaminated clothing.

##### Eye/face protection

Tightly fitting goggles (EN 166).

Eye wash bottle with pure water (EN 15154).

##### Hand protection

Chemical-resistant gloves (EN 374).

Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374): Nitrile rubber/nitrile latex - NBR (0,35 mm), Butyl rubber - Butyl (0,5 mm).

Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

##### Skin protection

Long sleeved clothing (EN 368).

##### Respiratory protection

No personal respiratory protective equipment normally required.

Breathing apparatus in the event of aerosol or mist formation.

### SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	Yellow, clear
Odour:	Odourless

pH-Value (at 20 °C): 8 - 10

##### Test method

##### Changes in the physical state

Melting point: approx. - 30 °C

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Initial boiling point and boiling range: 190 °C

Flash point: 116 °C

### Explosive properties

The product is not explosive.

Lower explosion limits: 3,2 vol. %

Upper explosion limits: 15,3 vol. %

Ignition temperature: 410 °C

### Oxidizing properties

The product is not self-igniting

Vapour pressure:  
(at 20 °C) 0,1 hPa

Density (at 20 °C): 1,125 g/cm<sup>3</sup>

Water solubility:  
(at 20 °C) Completely miscible

### 9.2. Other information

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No data available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reactions with strong oxidizing agents. In use formation of flammable/explosive vapour-air mixtures possible.

### 10.4. Conditions to avoid

No decomposition if used as directed.

### 10.5. Incompatible materials

Strong oxidizing agents, Bases.

### 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

Harmful if swallowed.

#### ATEmix calculated

ATE (oral) 526,3 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol, ethylene glycol				
	oral	LD50 mg/kg	5840	Rat	
	dermal	LD50 mg/kg	9530	Rabbit	

### Irritation and corrosivity

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

### Sensitising 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.

### STOT-single exposure

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

### STOT-repeated exposure

May cause damage to organs (kidney, oral) through prolonged or repeated exposure. (ethanediol, ethylene glycol)

### Aspiration hazard

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

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
107-21-1	ethanediol, ethylene glycol					
	Acute fish toxicity	LC50 mg/l	72860	96 h	Pimephales promelas	
	Acute algae toxicity	ErC50 13000 mg/l	6500 -	96 h	Pseudokirchneriela subcapitata	
	Acute crustacea toxicity	EC50 mg/l	> 1000	48 h	Daphnia magna	

### 12.2. Persistence and degradability

Readily biodegradable.

### 12.3. Bioaccumulative potential

No data available.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol, ethylene glycol	-1,36

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

Not determined.

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### **12.6. Other adverse effects**

Not determined.

### **Further information**

Do not release undiluted or in higher quantities into the groundwater, sewerage or waters.

## **SECTION 13: Disposal considerations**

### **13.1. Waste treatment methods**

#### **Advice on disposal**

Should not be disposed of with household waste. Do not flush into surface water or sanitary sewer system. Where possible recycling is preferred to disposal. The waste code number must be agreed with the disposer / manufacturer / competent authority.

#### **Waste disposal number of waste from residues/unused products**

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

#### **Waste disposal number of contaminated packaging**

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

#### **Contaminated packaging**

Empty containers should be taken for local recycling, recovery or waste disposal. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of like the product.

Cleaning agent: Water

## **SECTION 14: Transport information**

### **Land transport (ADR/RID)**

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

### **Inland waterways transport (ADN)**

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

### **Marine transport (IMDG)**

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |
| <b>14.4. Packing group:</b>              | No dangerous good in sense of this transport regulation. |

### **Air transport (ICAO-TI/IATA-DGR)**

- |  |  |
|--|--|
| <b>14.1. UN number:</b>                  | No dangerous good in sense of this transport regulation. |
| <b>14.2. UN proper shipping name:</b>    | No dangerous good in sense of this transport regulation. |
| <b>14.3. Transport hazard class(es):</b> | No dangerous good in sense of this transport regulation. |

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**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

### **14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

### **14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No dangerous good in sense of this transport regulation.

### **Other applicable information**

Not applicable. No hazardous material as defined by the transport regulations.

## **SECTION 15: Regulatory information**

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

#### **National regulatory information**

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).  
Water contaminating class (D): 1 - slightly water contaminating

### **15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

## **SECTION 16: Other information**

### **Changes**

Update 2017

### **Abbreviations and acronyms**

EC Directives: acts of the European Union, part of the secondary Union law  
CAS-Nr.: Chemical Abstracts Service  
EN 374: Standard for protective gloves (gloves for protection against chemicals and micro-organisms)  
EN 166: European safety standards for eye and face protection (requirements)  
STOT: Specific target organ toxicity  
AVV: European Waste Catalogue  
VOC: Volatile organic compound  
GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals  
ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road)  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail  
IMDG-Code: International Maritime Code for Dangerous Goods  
ADN: sea and inland waterway transport  
ICAO: International Civil Aviation Organization  
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships  
IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
n.a. - not applicable

### **Relevant H and EUH statements (number and full text)**

H302 Harmful if swallowed.  
H373 May cause damage to organs (kidney, oral) through prolonged or repeated exposure.  
H373 May cause damage to organs through prolonged or repeated exposure.

### **Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product



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(in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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