

# Safety Data Sheet

according to Regulation (EC) No 1907/2006



## GLYKOSOL 100

Revision date: 08.01.2018

Product code: 11386-0002

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

#### 1.1. Product identifier

GLYKOSOL 100

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

#### 1.4. Emergency telephone number:

### SECTION 2: Hazards identification

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

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

Hazard categories:

Flammable liquid: Flam. Liq. 3

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Flammable liquid and vapour.

May cause drowsiness or dizziness.

#### 2.2. Label elements

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

##### Hazard components for labelling

1-methoxy-2-propanol; monopropylene glycol methyl ether

Signal word: Warning

Pictograms:



##### Hazard statements

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P233 Keep container tightly closed.  
P240 Ground and bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting equipment.

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P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P235	Keep cool.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

### Additional advice on labelling

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

### 2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH), this product is regarded to be neither PBT nor vPvB. PED Category Group 2.

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

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Aqueous solution

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			50 - 100 %
	203-539-1	603-064-00-3	01-2119457435-35	
	Flam. Liq. 3, STOT SE 3; H226 H336			
64-17-5	ethanol, ethyl alcohol			10 - 25 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

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.

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### **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. Consult a physician.

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

Vapours may cause drowsiness and dizziness.

### **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.

#### **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**

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

### **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. Provide good room ventilation even at ground

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level (vapours are heavier than air).

### 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. Vapour/air mixture is explosive, even in empty uncleaned receptacles.

### 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

Protect from heat and direct solar radiation.

### 7.3. Specific end use(s)

No data available.

## 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
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		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, Butyl rubber.  
Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace

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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:	pearl-white
Odour:	Characteristic
pH-Value (at 20 °C):	8 - 9

### Changes in the physical state

Melting point:	Not applicable
Initial boiling point and boiling range:	78 °C
Sublimation point:	No data available.
Softening point:	No data available.
Flash point:	> 23 °C
Sustaining combustion:	No data available

### Flammability

Solid:	No data available.
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### Explosive properties

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	2,3 vol. %
Upper explosion limits:	20,0 vol. %
Ignition temperature:	270 °C

### Auto-ignition temperature

Solid:	No data available.
Decomposition temperature:	No data available.

### Oxidizing properties

The product is not self-igniting

Vapour pressure: (at 20 °C)	58,7 hPa
Density (at 20 °C):	approx. 0,93 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	Completely miscible

### Solubility in other solvents

No data available.

Partition coefficient:	No data available.
Viscosity / dynamic:	No data available.
Viscosity / kinematic:	No data available.
Flow time:	No data available.

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Vapour density: No data available.

Solvent content: 81,20 %, AQUA / Water: 18,60 %

### **9.2. Other information**

Solid content: 0 %

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**

Evolution of explosive gases/vapours. In use formation of flammable/explosive vapour-air mixtures possible. Uncleaned empty vessels may contain product gases which can form explosive mixtures with air.

### **10.4. Conditions to avoid**

Avoid high temperatures, impact, friction, electromagnetic fields, electrostatic charging, sparks and flames.

### **10.5. Incompatible materials**

Strong oxidizing agents

### **10.6. Hazardous decomposition products**

Carbon monoxide and carbon dioxide

## **SECTION 11: Toxicological information**

### **11.1. Information on toxicological effects**

#### **Toxicokinetics, metabolism and distribution**

Vapours may cause drowsiness and dizziness.

#### **Acute toxicity**

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50 > 5000 mg/kg	Rat		
	dermal	LD50 11000 mg/kg	Rabbit		
	inhalative vapour	LC50 54,6 mg/l	Rat		
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 6200 mg/kg	Rat		
	inhalative (4 h) vapour	LC50 95,6 mg/l	Rat		

#### **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.

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

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

### **STOT-single exposure**

May cause drowsiness or dizziness. (1-methoxy-2-propanol; monopropylene glycol methyl ether)

### **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.

## **SECTION 12: Ecological information**

### **12.1. Toxicity**

No data available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	Acute fish toxicity	LC50 4600 - 10000 mg/l	96 h	Leuciscus idus		
	Acute algae toxicity	ErC50 > 1000 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 > 500 mg/l	48 h	Daphnia magna		
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50 8140 mg/l	96 h	Golden orfe		
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	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
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	-0,437
64-17-5	ethanol, ethyl alcohol	- 0,31

### **12.4. Mobility in soil**

No data available.

### **12.5. Results of PBT and vPvB assessment**

Not determined.

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

Low hazard to waters.

### **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**

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### 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 used product

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)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Ethanol, 1-Methoxy-2-propanol)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Classification code: F1  
Special Provisions: 274 601  
Limited quantity: 5 L  
Excepted quantity: E1  
Transport category: 3  
Hazard No: 30  
Tunnel restriction code: D/E

### Inland waterways transport (ADN)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Ethanol, 1-Methoxy-2-propanol)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



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Classification code: F1  
Special Provisions: 274 601  
Limited quantity: 5 L  
Excepted quantity: E1

### Marine transport (IMDG)

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Ethanol, 1-Methoxy-2-propanol)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Special Provisions: 223, 274, 955  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-E, S-E

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

**14.1. UN number:** UN 1993  
**14.2. UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (Ethanol, 1-Methoxy-2-propanol)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3



Special Provisions: A3  
Limited quantity Passenger: 10 L  
Passenger LQ: Y344  
Excepted quantity: E1  
IATA-packing instructions - Passenger: 355  
IATA-max. quantity - Passenger: 60 L  
IATA-packing instructions - Cargo: 366  
IATA-max. quantity - Cargo: 220 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

No specific precautions required. Take the usual precautions when handling with chemicals.

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

The transport takes place only in approved and appropriate packaging.

## SECTION 15: Regulatory information

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

#### EU regulatory information

2010/75/EU (VOC): 81,2 %  
Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

#### 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 2018

#### Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road)  
IMDG-Code: International Maritime Code for Dangerous Goods  
ICAO: International Civil Aviation Organisation (IATA: The International Air Transport Association)  
GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

#### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
STOT SE 3; H336	Calculation method

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

H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.

#### 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 (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)

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