

Safety Data Sheet

according to 29 CFR 1910.1200(g)



GLYKOSOL N

Revision date: 08.01.2018

Product code: 11386-0003US

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1. Identification

Product identifier

GLYKOSOL N

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Various

Details of the supplier of the safety data sheet

Company name: pro KÜHsole 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

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

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Acute toxicity: Acute Tox. 4 (oral)

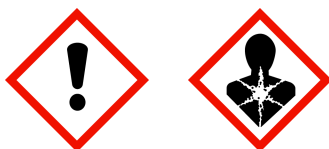
Specific target organ toxicity repeated or prolonged exposure: STOT RE 2

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

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

Wash hands thoroughly after handling.

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 in accordance with local/regional/national/international/ regulations.

Hazards not otherwise classified

According to Regulation (EC) No 1907/2006 (REACH), this product does not meet the criteria for PBT or vPvB.

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

3. Composition/information on ingredients

Mixtures

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Chemical characterization

Mixture of the following substances with non-hazardous admixtures

Hazardous components

CAS No	Components	Quantity
107-21-1	ethanediol, ethylene glycol	95 %

4. First-aid measures

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.

Most important symptoms and effects, both acute and delayed

OSHA Hazard Communication: This material is considered hazardous by the OSHA Hazard Communication Standard 29CFR 1910.1200.

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

Indication of any immediate medical attention and special treatment needed

Treat symptoms.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

Specific hazards arising from the chemical

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.

Special protective equipment and precautions for fire-fighters

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

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firefighting water must be disposed of in accordance with the local regulations.

6. Accidental release measures

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.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

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.

Reference to other sections

Information for disposal look up chapter 13.

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Use only in thoroughly ventilated areas. Avoid contact with eyes, skin or mucous membrane. Ensure adequate room ventilation, if necessary ensure local exhaust at workplace.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures against electrostatic 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.

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.

Hints on joint storage

Keep away from food, drink and animal feeding stuffs.

Further information on storage conditions

Keep container tightly closed.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
107-21-1	Ethylene glycol (vapor fraction)	25			TWA (8 h)	ACGIH-2018
		50			STEL (15 min)	ACGIH-2018

Exposure controls

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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.

Eye wash bottle with pure water.

Hand protection

Chemical-resistant gloves (EN 374) / NIOSH/MSHA approved

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.

Respiratory protection

No personal respiratory protective equipment normally required.

Breathing apparatus in the event of aerosol or mist formation.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	Yellow, clear
Odor:	Odorless
pH-Value (at 20 °C):	8 - 10

Changes in the physical state

Melting point/freezing point:	approx. - 30 °C
Initial boiling point and boiling range:	190 °C
Sublimation point:	No data available
Softening point:	No data available
Flash point:	116 °C
Sustaining combustion:	No data available

Flammability

Solid:	No data available
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Explosive properties

The product is not explosive.

Lower explosion limits:	3.2 vol. %
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Upper explosion limits: 15.3 vol. %

Ignition temperature: 410 °C

Auto-ignition temperature

Solid: No data available

Decomposition temperature: No data available

Oxidizing properties

The product is not self-igniting.

Vapor pressure:
(at 20 °C) 0.1 hPa

Density (at 20 °C): 1.125 g/cm³

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

Vapor density: No data available

Solvent content: 95.00 %

Other information

No data available

10. Stability and reactivity

Reactivity

No data available

Chemical stability

Stability: Stable

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

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

Conditions to avoid

No decomposition if used as directed.

Incompatible materials

Strong oxidizing agents, Bases.

Hazardous decomposition products

Carbon monoxide and carbon dioxide

11. Toxicological information

Information on toxicological effects

Route(s) of Entry

Skin and eye contact, inhalation and ingestion.

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Acute toxicity

Harmful if swallowed

ATEmix calculated

ATE (oral) 526,3 mg/kg

CAS No	Components				
	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.

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): Not listed

Carcinogenicity (IARC): Not listed

Carcinogenicity (NTP): Not listed

Aspiration hazard

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

12. Ecological information

Ecotoxicity

No data available

Persistence and degradability

Liable to easy biological disintegration.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Not determined.

Further information

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

13. Disposal considerations

Waste treatment methods

Advice on disposal

Should not be disposed of with household waste.

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Do not flush into surface water or sanitary sewer system.
Where possible recycling is preferred to disposal.
Waste disposal according to local regulations.

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

14. Transport information

US DOT 49 CFR 172.101

Proper shipping name: Not regulated.

Marine transport (IMDG)

UN 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: 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

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All of the components are listed on the TSCA inventory.

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),

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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.

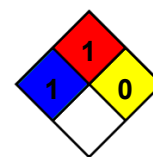
16. Other information

Hazardous Materials Information Label (HMIS)

Health: *1
Flammability: 1
Physical Hazard: 0

NFPA Hazard Ratings

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



Changes

Revision date: 08.01.2018
Revision No: 1,0
Update 2018

Abbreviations and acronyms

ADR: 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

Other data

The information in this document is based on the present state of knowledge and is applicable to the product with regard to appropriate safety precautions.
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.)