

SAFETY DATA SHEET

POLYETHYLENE GLYCOL 400

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830

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

1.1. Product identifier

Product name : Polyethylene Glycol 400
EC number : 500-038-2
CAS number : 25322-68-3
INCI Name : Not available/not applicable
REACH Registration number : The substance is not subject to registration under Regulation (EC) No. 1907/2006 [REACH].
Other means of identification : PEG 400; Carbowax; Polyglycol
Chemical formula : HO-(CH₂-CH₂-O)_n-H

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

Typical applications : Component in pharmaceutical preparations and cosmetics.
Component in synthetic lubricants, cutting oils, hydraulic fluids and bitumens.
Used in the manufacture of synthetic resins, plasticizers and adhesives.
Raw material in the manufacture of polyethylene glycol esters.
Used in the paper, rubber, textile, metal and graphic arts industries.

Uses advised against : Uses other than those recommended.

1.3. Details of the supplier of the safety data sheet

Name : GLI-THERM Sp. z o.o.
Address : st. Rozwojowa 11, 44-338 Jastrzębie-Zdrój Poland
Regon : 242850136
NIP/Tax No : 6423178990
Telephone : +48 733 525 533
E-mail : sandra.stachowicz@gli-therm.eu
Website address : www.gli-therm.eu

1.4. Emergency telephone number

National advisory body/Poison Center:

Ireland : National Poisons Information Centre
Emergency number:
+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166
(public, 8am - 10pm, 7/7)

United Kingdom	:	National Poisons Information Service (Newcastle Centre) Emergency number: 0844 892 0111 (UK only, 24/7, healthcare professionals only)
Poland	:	Szpital Praski p.w. Przemienienia Pańskiego Sp. z o.o. Emergency number: +48 22 619 66 54 +48 22 619 08 97
Germany	:	Vergiftungs-Informations-Zentrale Freiburg Emergency number: +49 (0) 761 19240
24 Hour Emergency Telephone	:	+(44)-8708200418 CHEMTREC
Supplier		
Telephone number	:	+48 733 525 533

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

The product is not classified as hazardous within the meaning of Regulation (EU) No 1272/2008.

2.2. Label elements

Hazard pictograms	:	Not applicable
Signal word	:	Not applicable
Hazard statements	:	Not applicable

Precautionary statements

Prevention	:	Not applicable
Response	:	Not applicable
Storage	:	Not applicable
Disposal	:	Not applicable

2.3. Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII : Not applicable

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : Not applicable

Other hazards which do not result in classification : Not applicable

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

SECTION 3: Composition/information on ingredients

3.1. Substance

Mono-constituent substance

Substance	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
Poli (oxi-1.2-etinediil), alfa-hidro-omega-hidroksi	EC: 500-038-2 CAS: 25322-68-3 REACH: Not available/not applicable	> 99.5	Polyethylene Glycol 400	[A]
Water	EINECS: 231-791-2	<0.5		[B]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type:

[A] Constituent

[B] Impurity

[C] Stabilizing additive

Occupational exposure limits, if available, are listed in Section 8.

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

Due to the composition and type of the substances present in the product, no particular warnings are necessary.

Eye contact	:	Remove contact lenses, if present and if it is easy to do. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.
Inhalation	:	Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration.
Skin contact	:	Remove contaminated clothing.
Ingestion	:	Keep calm. NEVER induce vomiting.

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

Potential acute health effects	:	No known acute or delayed effects from exposure to the product.
Over-exposure signs/symptoms	:	No known acute or delayed effects from exposure to the product.

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

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray.

Unsuitable extinguishing media : Do not use water in a jet

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account.

Special precautions for fire-fighters : Follow standard procedures for chemical fires

Special protective equipment for fire-fighters : Use standard procedures for extinguishing chemicals

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For exposure control and individual protection measures, see section 8.

6.2. Environmental precautions

Product not classified as hazardous for the environment, avoid spillage as much as possible.

6.3. Methods and materials for containment and cleaning up

Contain and collect spillage with inert absorbent material (earth, sand, vermiculite, Kieselguhr...) and clean the area immediately with a suitable decontaminant. Deposit waste in closed and suitable containers for disposal, in compliance with local and national regulations

6.4. Reference to other sections

See section 7 for safe handling information.

For information on personal protective equipment, see section 8.

See section 13 for disposal information

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1. Precautions for safe handling

HANDLING : The product does not require special handling measures, the following general measures are recommended: For personal protection, see section 8. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Never use pressure to empty the containers. They are not pressure-resistant containers. Keep the product in containers made of a material identical to the original.

7.2. Conditions for safe storage, including any incompatibilities.

Requirements for storage rooms and tanks : The product does not require special storage measures. As general storage measures, sources of heat, radiation, electricity and contact with food should be avoided.
Keep away from oxidising agents and from highly acidic or alkaline materials.
Store the containers between 5 and 35 °C, in a dry and well-ventilated place. Store according to local legislation. Observe indications on the label.
Once the containers are open, they must be carefully closed and placed vertically to prevent spills.
The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3. Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance.

8.1. Control parameters

The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

Occupational exposure limits : Threshold limit values (VLA): Not specified

DNEL (Derived No Effect Level) / DMEL (Derived Minimal Effect Level) for workers: Not applicable

PNEC (Predicted No Effect Concentration): Not applicable

8.2. Exposure controls

Individual protection measures

Hygiene measures : The product does not require special handling measures, the following general measures are recommended: In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety.

Eye/face protection	:	If the product is handled correctly, no individual protection equipment is necessary.
Hand protection	:	If the product is handled correctly, no individual protection equipment is necessary.
Body protection	:	
Other skin protection	:	PPE: Work footwear. Characteristics: «CE» marking, category II. CEN standards: EN ISO 13287, EN 20347 Maintenance: This product adapts to the first user's foot shape. That is why, as well as for hygienic reasons, it should not be used by other people. Observations: Work footwear for professional use includes protection elements aimed at protecting users against any injury resulting from an accident
Respiratory protection	:	If the recommended technical measures are observed, no individual protection equipment is necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Scale Pt-Co Maximum 15 Hazen
Odor	:	Odourless
Odor threshold	:	Not Available/Not Applicable due to the nature of the product
pH	:	4.0 - 7.0
Melting point/freezing point	:	-7 °C
Boiling Point	:	250 °C
Flash point	:	240 °C
Evaporation rate	:	Not Available/Not Applicable due to the nature of the product
Flammability (solid, gas)	:	257 °C
Lower explosive limits	:	Not Available/Not Applicable due to the nature of the product
Upper explosive limits	:	60
Vapor pressure	:	Not Available/Not Applicable due to the nature of the product
Vapor density	:	Not Available/Not Applicable due to the nature of the product
Relative density	:	1.13
Solubility(ies)	:	Alcohols, glycols, cetone, and aromatic hydrocarbons
Solubility in water at room temperature (g/l)	:	Completely miscible
Partition coefficient: n-octanol/water	:	Not Available/Not Applicable due to the nature of the product
Auto-ignition temperature	:	320 °C
Decomposition temperature	:	300 °C
Viscosity	:	6.7 - 7.5
Kinematic viscosity:	:	Not Available/Not Applicable due to the nature of the product

Dropping point : Not Available/Not Applicable due to the nature of the product
Blink : Not Available/Not Applicable due to the nature of the product

9.2. Other information

Explosive properties : Not Available/Not Applicable due to the nature of the product
Oxidizing properties : Not Available/Not Applicable due to the nature of the product
Additional information : -

SECTION 10: Stability and reactivity

10.1. Reactivity

The product does not present hazards by their reactivity.

10.2 Chemical stability

Unstable in contact with:

- Acids.
- Bases.
- Oxidizing agents.

10.3. Possibility of hazardous reactions

Neutralization can occur on contact with bases. In certain conditions this may cause a polymerization reaction.

10.4. Conditions to avoid

Avoid the following conditions : - Heating.
- High temperature. Exposure to elevated temperatures may cause product weakening. Gas generation during failure can cause pressure in closed systems.
- Contact with incompatible materials.
- Avoid contact with bases.

10.5. Incompatible materials

Avoid the following materials : Acids; Bases; Oxidizing agents.

10.6 Hazardous decomposition products

Depending on conditions of use, can be generated the following products : CO_x (carbon oxides); Organic compounds; Corrosive vapors or gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

There are no tested data available on the product.

Acute toxicity : Not conclusive data for classification.
Skin corrosion/irritation : Not conclusive data for classification.
Serious eye damage/eye irritation : Not conclusive data for classification.
Respiratory or skin sensitisation : Not conclusive data for classification.
Germ cell mutagenicity : Not conclusive data for classification.
Carcinogenic : Not conclusive data for classification.

Reproductive toxicity	:	Not conclusive data for classification.
STOT-single exposure	:	Not conclusive data for classification.
STOT-repeated exposure	:	Not conclusive data for classification.
Aspiration hazard	:	Not conclusive data for classification.

SECTION 12: Ecological information

12.1. Toxicity

No information is available regarding the ecotoxicity.

12.2 Persistence and degradability

No information is available regarding the biodegradability.

No information is available on the degradability. No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential

No information is available regarding the bioaccumulation.

12.4 Mobility in soil

No information is available about the mobility in soil.

The product must not be allowed to go into sewers or waterways.

Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment

PBT : No information is available about the results of PBT and vPvB assessment of the product.

vPvB : No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects

No information is available about other adverse effects for the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.

Follow the provisions of Directive 2008/98/EC regarding waste management.

SECTION 14: Transport information

	ADR/RID	ADNR/ADN	IMDG	IATA
14.1. UN Number	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN Proper Shipping Name	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport Hazard Class(es)	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing Group	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental Hazards	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No
14.6. Special Precautions for users	No data available	No data available	No data available	No data available

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Has no use

SECTION 15: Regulatory information

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

The product is not affected by the Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer.

Volatile organic compound (VOC)

VOC content (p/p): 0 %

VOC content: 0 g/l

Product classification according to Annex I of Directive 2012/18/EU (SEVESO III): N/A

The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

The data is confirmed based on the state of our knowledge, but does not determine how the production properties and cannot be used to justify legally binding contracts.

Abbreviations and acronyms

REACH	:	Registration, Evaluation, Authorisation and Restriction of Chemical
MARPOL	:	(from Marine Pollutant) International Convention for the Prevention of Marine Pollution from Ships
N/A	:	Not applicable
N/D	:	Not determined
NE	:	Not established
VOC	:	Volatile Organic Compound
AICS	:	Australian Inventory of Chemical Substances
AIHA WEEL	:	American Industrial Hygiene Association Workplace Environmental Exposure Limits
DSL	:	Domestic Substance List (Canada)
ELINCS	:	European List of Notified Chemical Substances
ENCS	:	Existing and new Chemical Substances (Japanese inventory)
IECSC	:	Inventory of Existing Chemical Substances in China
KECI	:	Korean Existing Chemicals Inventory
NDSL	:	Non-Domestic Substances List (Canada)
NZIoC	:	New Zealand Inventory of Chemicals
PICCS	:	Philippine Inventory of Chemicals and Chemical Substances
TLV	:	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TSCA	:	Toxic Substances Control Act (U.S. inventory)
UVCB	:	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
IBC Code	:	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
UN	:	United Nations (also UNO: United Nations Organization)
NOEC	:	No Observed Effect Concentration
NOELR	:	No Observable Effect Loading Rate
OECD	:	Organization for Economic Co-operation and Development
ASTM	:	American Society for Testing and Materials
WAF	:	Water Accommodated Fraction
ADR	:	Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG	:	International Maritime Code for Dangerous Goods
IATA	:	International Air Transport Association
GHS	:	Globally Harmonised System of Classification and Labeling of Chemicals

EINECS	:	European Inventory of Existing Commercial Chemical Substances
CAS	:	Chemical Abstracts Service (division of the American Chemical Society)
DNEL	:	Derived No-Effect Level (REACH)
PNEC	:	Predicted No-Effect Concentration (REACH)
LC	:	Lethal Concentration
LD	:	Lethal Dose
LL	:	Lethal Loading
EC	:	Effective Concentration
EL	:	Effective Loading
LC50	:	Lethal concentration, 50 percent
LD50	:	Lethal dose, 50 percent
PBT	:	Persistent, Bioaccumulative and Toxic
vPvB	:	very Persistent and very Bioaccumulative
Acute Tox, 4	:	Acute toxicity - Category 4

Notice to reader : The information contained herein is accurate to the latest knowledge and describes the product from the point of view of help and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"