SAFETY DATA SHEET

POLYETHYLENE GLYCOL 200

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

Date of issue	:	2019-11-12
Date of revision	:	2022-11-29
Version	:	1

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

1.1. Product identifier

Product name	:	Polyethylene Glycol 200
Chemical name	:	Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated
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 200; Carbowax; Polyglycol
Chemical formula	:	$C_{2n+2}H_{4n+6}O_{n+2}$

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

Typical applications	:	Synthesis agent for the manufacturing of polymers.
Uses advised against	:	No additional information available

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.glitherm.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]
Not classified according to 1272/2008.
Not classified according to 67/548/EEC.
Adverse physicochemical, human health and environmental effects
No additional information available.

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	:	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Other hazards which do not result in classification	:	Eye contact may cause slight irritation. The estimated fatal dose (LD50) reduces as molecular weight increases (LD50/ in rat/ for PEG 200 = 28000-36000 mg/kg; PEG 1000 > 7000 mg/kg). Continous ingestion in animals has caused some toxic effects. Case of toxicity may cause agglutination in cellular elements.

SECTION 3: Composition/information on ingredients

3.1. Substance

Mono-constituent substance

Substance	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
Polyethylene Glycol 200 (Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated)	CAS: 25322-68-3 REACH: Not available/not applicable	-	Polyethylene Glycol 200	[A]

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

Measures general : In case of doubt or persistent symptoms, consult always a physician. Take off immediately all contaminated clothing.

Eye contact : In case of contact, flush eyes with plenty of water for at least 15 minutes. Get medical advice if irritation develops.

Inhalation : No adverse health effects expected from inhalation (May be a mechanical irritant). Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

Skin contact : In case of contact, flush skin immediately with plenty of soap and water for at least 15 minutes. Remove contaminated clothing or shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.

Ingestion : Do not induce vomiting. Obtain medical attention immediately.

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

Potential acute health effects : Not considered an health hazard, under normal use conditions.

Over-exposure signs/symptoms : Not considered an health hazard, under normal use conditions.

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

Notes to physician : Treat according to symptoms.

Specific treatments	:	Specific antidote not known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Alcohol-resistant foam may be used for larger fires.
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	:	Not classified as flammable but may burn, because of its flash point. Toxic fumes may be released. Carbon monoxide. Carbon dioxide.

5.3 Advice for firefighters

Special precautions for fire-fighters	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	:	Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray. Disposal must be done according to official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	Concerning personal protective equipment to use, see section 8. Ventilate spillage area. Keep away from sources of ignition - No smoking.
For emergency responders	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid sub-soil penetration.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	:	Take up liquid spill into absorbent material. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information	:	Shovel into suitable and closed container for disposal. Disposal must be done according to official regulations.

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 7 for information on safe handling.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from any flames or sparking source. Precautionary measures fire.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities.

Storage conditions	:	Store in a dry place. Store at room temperature. Keep away from heat and direct sunlight. Protect from moisture. Store in a well-ventilated place. Keep cool.
Information about storage in one common storage facility	:	Keep away from food, drink and animal feeding stuffs.
Packaging materials	:	Suitable packing materials. Polypropylene. Uncoated stainless steel. Coated steels.

7.3. Specific end use(s)

Recommendations	:	No additional information available.
Industrial sector specific solutions	:	No additional information available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance.

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Eye/face protection	:	Wear closed safety glasses. EN 166
Hand protection	:	In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves. EN 374. Nitrile rubber. Polyvinylchloride (PVC). Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear. Apply emollient cream
Body protection	:	Wear suitable protective clothing. EN 340. EN 13034
Other skin protection	:	Wear suitable protective clothing. EN 340. EN 13034
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment. Filter A (colour code: brown). Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust.
Environmental exposure controls	:	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Colourless.
Odor	:	Odourless.
Odor threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Hygroscopicity	:	
Melting point/freezing point	:	-36 °C
Boiling point	:	No data available
Flash point	:	199 °C
Evaporation rate	:	
Flammability (solid, gas)	:	No data available
Upper/lower flammability or explosive limits	:	No data available
Vapor pressure	:	No data available
Vapor density	:	
Density	:	1.12 g/cm3 (20 °C)
Relative density	:	No data available

Solubility(ies)	:	soluble in most organic solvents.
Solubility in water	:	soluble in water
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Specific heat	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	55 - 65 mPa·s (DIN 51562)

9.2. Other information

Explosive properties	:	No data available
Oxidizing properties	:	No data available
Other properties	:	Hygroscopic.

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available.

10.2 Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Strong oxidizing agent. Strong acids. Strong bases.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)
Oral	:	LD50 > 15 000 mg/kg bodyweight (Rat)
Skin	:	LD50 > 20 000 mg/kg bodyweight (Rabbit)

Skin corrosion/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Additional information	:	Repeated or prolonged skin contact may cause irritation
Serious eye damage/irritation	:	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	:	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	:	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	:	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	:	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	:	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	:	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	:	Not classified (Based on available data, the classification criteria are not met)

11.2 Endocrine disrupting properties.

They are not known.

11.3 Information about other hazards.

They are not known.

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	:	Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	:	Not classified (Based on available data, the classification criteria are not met)

Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated (25322-68-3)

LC50 fish 1	:	1700 mg/l (96 h; Lepomis macrochirus (Bluegill))
LC50 fish 2	:	> 20000 mg/l (96 h; Carrasius auratus)
EC50 Daphnia 1	:	> 100 mg/l (48 h; Daphnia magna)
EC50, Bacteriae	:	> 1000 mg/l

12.2 Persistence and degradability

Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated (25322-68-3)

Persistence and degradability	:	Readily biodegradable.
Biodegradation	:	70 % (20 d; (OECD 301A method))

12.3 Bioaccumulative potential

Bioaccumulation is unlikely.

12.4 Mobility in soil

No additional information available

12.5 Results of PBT and vPvB assessment

PBT	:	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
vPvB	:	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6 Endocrine disrupting properties.

They are not known.

12.7 Other adverse effects

No further relevant information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	:	Disposal must be done according to official regulations. European waste catalogue. Do not dispose of with domestic waste. Do not discharge into drains or the environment.
Product/Packaging disposal recommendations	:	Do not re-use empty containers without proper cleaning or reconditioning.
European List of Waste (LoW) code	:	07 01 99 - wastes not otherwise specified

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated is not on the REACH Candidate List

Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated is not on the REACH Annex XIV List

Polyethylene glycol (types: 200 / 300 / 400 / 600 / 800) is not subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Polyethylene glycol (types: 200 / 300 / 400 / 600 / 800) is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Other information, restriction and prohibition regulations : A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

15.1.2. National regulations

No additional information available

15.2 Chemical Safety Assessment:

No chemical safety assessment has been carried out

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; acronyms and full text of H-Statements

H225	:	Highly flammable liquid and vapour.
H290	:	May be corrosive to metals.
H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H312	:	Harmful in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H331	:	Toxic if inhaled.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H341	:	Suspected of causing genetic defects.
H350i	:	May cause cancer by inhalation.
H360D	:	May damage the unborn child.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
NDS	:	The highest acceptable concentration
NDSCh	:	Highest Permissible Temporary Concentration
NDSP	:	Maximum Allowable Ceiling Concentration
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"