

**SAFETY DATA SHEET**

PolyEthylene Oxide Standard

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

**1.1 Product identifier**

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name     | : PolyEthylene Oxide Standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| EC number        | : 500-038-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| CAS number       | : 25322-68-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Part no.         | :  PL2080-0101, PL2084-2010, PL2084-2001, PL2084-2005, PL2083-5010, PL2083-5001, PL2083-5005, PL2083-6010, PL2083-6001, PL2083-6005, PL2084-1010, PL2084-1001, PL2084-1005, PL2083-7010, PL2083-7001, PL2083-7005, PL2083-1001, PL2083-1005, PL2083-8010, PL2083-8001, PL2083-8005, PL2083-2010, PL2083-2001, PL2083-2005, PL2083-9010, PL2083-9001, PL2083-9005, PL2083-3010, PL2083-3001, PL2083-3005, PL2084-0010, PL2084-0001, PL2084-0005, PL2083-4010, PL2083-4001, PL2083-4005, PL2083-1010 |
| Chemical formula | :  $\text{H}-(\text{O}-\text{CH}_2-\text{CH}_2)_n-\text{OH}$                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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

|                      |                                                                                                                                                                                         |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Identified uses      | :  Reagents and Standards for Analytical Chemistry Laboratory Use<br>For Research and Development Only |
|                      | PL2080-0101 PEO calibration kit                                                                                                                                                         |
|                      | PL2084-2010 PEO NOMINAL MP 1.5M 10G                                                                                                                                                     |
|                      | PL2084-2001 PEO NOMINAL MP 1.5M 1G                                                                                                                                                      |
|                      | PL2084-2005 PEO NOMINAL MP 1.5M 5G                                                                                                                                                      |
|                      | PL2083-5010 PEO NOMINAL MP 100K 10G                                                                                                                                                     |
|                      | PL2083-5001 PEO NOMINAL MP 100K 1G                                                                                                                                                      |
|                      | PL2083-5005 PEO NOMINAL MP 100K 5G                                                                                                                                                      |
|                      | PL2083-6010 PEO NOMINAL MP 130K 10G                                                                                                                                                     |
|                      | PL2083-6001 PEO NOMINAL MP 130K 1G                                                                                                                                                      |
|                      | PL2083-6005 PEO NOMINAL MP 130K 5G                                                                                                                                                      |
|                      | PL2084-1010 PEO NOMINAL MP 1M 10G                                                                                                                                                       |
|                      | PL2084-1001 PEO NOMINAL MP 1M 1G                                                                                                                                                        |
|                      | PL2084-1005 PEO NOMINAL MP 1M 5G                                                                                                                                                        |
|                      | PL2083-7010 PEO NOMINAL MP 200K 10G                                                                                                                                                     |
|                      | PL2083-7001 PEO NOMINAL MP 200K 1G                                                                                                                                                      |
|                      | PL2083-7005 PEO NOMINAL MP 200K 5G                                                                                                                                                      |
|                      | PL2083-1001 PEO NOMINAL MP 20K 1G                                                                                                                                                       |
|                      | PL2083-1005 PEO NOMINAL MP 20K 5G                                                                                                                                                       |
|                      | PL2083-8010 PEO NOMINAL MP 300K 10G                                                                                                                                                     |
|                      | PL2083-8001 PEO NOMINAL MP 300K 1G                                                                                                                                                      |
|                      | PL2083-8005 PEO NOMINAL MP 300K 5G                                                                                                                                                      |
|                      | PL2083-2010 PEO NOMINAL MP 30K 10G                                                                                                                                                      |
|                      | PL2083-2001 PEO NOMINAL MP 30K 1G                                                                                                                                                       |
|                      | PL2083-2005 PEO NOMINAL MP 30K 5G                                                                                                                                                       |
|                      | PL2083-9010 PEO NOMINAL MP 500K 10G                                                                                                                                                     |
|                      | PL2083-9001 PEO NOMINAL MP 500K 1G                                                                                                                                                      |
|                      | PL2083-9005 PEO NOMINAL MP 500K 5G                                                                                                                                                      |
|                      | PL2083-3010 PEO NOMINAL MP 50K 10G                                                                                                                                                      |
|                      | PL2083-3001 PEO NOMINAL MP 50K 1G                                                                                                                                                       |
|                      | PL2083-3005 PEO NOMINAL MP 50K 5G                                                                                                                                                       |
|                      | PL2084-0010 PEO NOMINAL MP 700K 10G                                                                                                                                                     |
|                      | PL2084-0001 PEO NOMINAL MP 700K 1G                                                                                                                                                      |
|                      | PL2084-0005 PEO NOMINAL MP 700K 5G                                                                                                                                                      |
|                      | PL2083-4010 PEO NOMINAL MP 70K 10G                                                                                                                                                      |
|                      | PL2083-4001 PEO NOMINAL MP 70K 1G                                                                                                                                                       |
|                      | PL2083-4005 PEO NOMINAL MP 70K 5G                                                                                                                                                       |
|                      | PL2083-1010 PEO NOMINAL MP 20K 10G                                                                                                                                                      |
| Uses advised against | : None known.                                                                                                                                                                           |

**1.3 Details of the supplier of the safety data sheet**

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

Agilent Technologies Deutschland GmbH  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds\_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +353 1 901 4670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance

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

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

| PBT | P   | B  | T  | vPvB | vP  | vB |
|-----|-----|----|----|------|-----|----|
| No  | N/A | No | No | No   | N/A | No |

Other hazards which do not result in classification : May form explosible dust-air mixture if dispersed.

**PolyEthylene Oxide Standard****SECTION 3: Composition/information on ingredients****3.1 Substances** : Mono-constituent substance

| Product/ingredient name                                                                    | Identifiers                      | %   | Classification  | Specific Conc. Limits, M-factors and ATEs | Type |
|--------------------------------------------------------------------------------------------|----------------------------------|-----|-----------------|-------------------------------------------|------|
| Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy- Ethane-1,2-diol, ethoxylated | EC: 500-038-2<br>CAS: 25322-68-3 | 100 | Not classified. | -                                         | [1]  |

Type

[1] Constituent

**See Section 16 for the full text of the H statements declared above.**

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.

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

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

**4.2 Most important symptoms and effects, both acute and delayed**Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
irritation  
redness
- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

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

**PolyEthylene Oxide Standard**

## SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : May form explosible dust-air mixture if dispersed.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

### 5.3 Advice for firefighters

- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

- Methods for cleaning up** : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

**PolyEthylene Oxide Standard****SECTION 7: Handling and storage**

- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

**7.3 Specific end use(s)**

**Recommendations** : Industrial applications, Professional applications.

**Industrial sector specific solutions** : Not available.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limits**

No exposure limit value known.

**Biological exposure indices**

No exposure indices known.

- Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

| <b>Product/ingredient name</b>                                                             | <b>Result</b>                                                             |
|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy- Ethane-1,2-diol, ethoxylated | DNEL - General population - Long term - Inhalation 7.14 mg/m <sup>3</sup> |
|                                                                                            | DNEL - General population - Long term - Oral 40 mg/kg bw/day              |
|                                                                                            | DNEL - General population - Long term - Dermal 40 mg/kg bw/day            |
|                                                                                            | DNEL - Workers - Long term - Inhalation 40.2 mg/m <sup>3</sup>            |
|                                                                                            | DNEL - Workers - Long term - Dermal 112 mg/kg bw/day                      |

**PNECs**

Not available.

**8.2 Exposure controls**

- Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Individual protection measures**

**SECTION 8: Exposure controls/personal protection**

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hygiene measures</b>                | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.                                                          |
| <b>Eye/face protection</b>             | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles. |
| <b>Skin protection</b>                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Hand protection</b>                 | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.                                                                                                                                                                                                                                                      |
| <b>Body protection</b>                 | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.                                                                                                                                                                                                                                                  |
| <b>Other skin protection</b>           | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.                                                                                                                                                                                                                            |
| <b>Respiratory protection</b>          | : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.                                                                                                                                                                     |
| <b>Environmental exposure controls</b> | : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.                                                                                                                         |

**SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties****Appearance**

|                                                                 |                                                                                         |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>Physical state</b>                                           | : Solid. [Powder. (Molecular weight (Low) = liquid , Molecular weight (High) = Solid.)] |
| <b>Colour</b>                                                   | : White.                                                                                |
| <b>Odour</b>                                                    | : Odourless.                                                                            |
| <b>Odour threshold</b>                                          | : Not available.                                                                        |
| <b>Melting point/freezing point</b>                             | : Various                                                                               |
| <b>Boiling point or initial boiling point and boiling range</b> | : 250°C                                                                                 |
| <b>Flammability</b>                                             | : Not available.                                                                        |
| <b>Lower and upper explosion limit/flammability limit</b>       | : Not applicable.                                                                       |
| <b>Flash point</b>                                              | : Closed cup: 171 to 235°C<br>Open cup: 240°C                                           |
| <b>Auto-ignition temperature</b>                                | : 360°C                                                                                 |
| <b>Decomposition temperature</b>                                | : Not available.                                                                        |
| <b>pH</b>                                                       | : 4.78 [OECD 122]                                                                       |

**PolyEthylene Oxide Standard****SECTION 9: Physical and chemical properties**

**Viscosity** : Dynamic (room temperature): Not available.  
 Kinematic (room temperature): Not available.  
 Kinematic (40°C): 191.672 mm<sup>2</sup>/s [OECD 114]

| <b>Solubility</b> | <b>Media</b> | <b>Result</b> |
|-------------------|--------------|---------------|
|                   | water        | Soluble       |

**Solubility in water** : 256.084 g/l [OECD 105]

**Partition coefficient: n-octanol/water** : 0.2

**Vapour pressure** : 0.00000004 kPa (0.0000003 mm Hg)

**Relative density** : 1.1 to 1.3

**Density** : 1.116 g/cm<sup>3</sup> [25°C] [OECD 109]

**Relative vapour density** : Not applicable.

**Particle characteristics**

**Median particle size** : Not available.

**9.2 Other information****9.2.1 Information with regard to physical hazard classes**

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

**9.2.2 Other safety characteristics**

**Evaporation rate** : Not available.

**Physical/chemical properties comments** : Not available.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

**10.4 Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidising materials

**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**

**Conclusion/Summary [Product]** : Not available.

**Acute toxicity estimates**

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SECTION 11: Toxicological information

| Product/ingredient name                                                 | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|-------------------------------------------------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy-Ethane-1,2-diol, ethoxylated | 28000        | N/A            | N/A                      | N/A                         | N/A                                 |

Skin corrosion/irritation

Product/ingredient name

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

Result

Rabbit - Skin - Mild irritant

Duration of treatment/  
exposure: 24 hours  
Amount/concentration  
applied: 500 mg  
Amount/concentration  
applied: 500 mg  
Duration of treatment/  
exposure: 24 hours  
Amount/concentration  
applied: 500 mg  
Amount/concentration  
applied: 500 mg  
Amount/concentration  
applied: 500 mg

Rabbit - Skin - Mild irritant

Rabbit - Skin - Mild irritant

Rabbit - Skin - Mild irritant

Rabbit - Skin - Mild irritant

Conclusion/Summary : May cause skin irritation.  
[Product]

Serious eye damage/eye irritation

Product/ingredient name

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

Result

Rabbit - Eyes - Mild irritant

Duration of treatment/  
exposure: 24 hours  
Amount/concentration  
applied: 500 mg

Rabbit - Eyes - Mild irritant

Duration of treatment/  
exposure: 24 hours  
Amount/concentration  
applied: 500 mg

Rabbit - Eyes - Mild irritant

Amount/concentration  
applied: 500 mg

Rabbit - Eyes - Mild irritant

Amount/concentration  
applied: 100 uL

Conclusion/Summary : May cause eye irritation.  
[Product]

Respiratory corrosion/irritation

Conclusion/Summary : May cause respiratory irritation.  
[Product]

Respiratory or skin sensitization

Skin

Conclusion/Summary : Not available.  
[Product]

Respiratory

Conclusion/Summary : Not available.  
[Product]

**SECTION 11: Toxicological information**Germ cell mutagenicity

**Conclusion/Summary** : Not available.  
**[Product]**

Carcinogenicity

**Conclusion/Summary** : Not available.  
**[Product]**

Reproductive toxicity

**Conclusion/Summary** : Not available.  
**[Product]**

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

**Information on likely routes of exposure** : Not available.

Potential acute health effects

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
irritation  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

**Skin contact** : No specific data.

**Ingestion** : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposureShort term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

Potential chronic health effects

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SECTION 11: Toxicological information

- Conclusion/Summary** : Not available.
- [Product]**
- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

- Conclusion/Summary** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.
- [Product]**

SECTION 12: Ecological information

12.1 Toxicity

- Product/ingredient name** **Result**
- Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated Acute - LC50 - Fresh water >1000 mg/l [96 hours]
- Acute - EC50 - Fresh water >100 mg/l [48 hours]
- Conclusion/Summary** : Not available.
- [Product]**

12.2 Persistence and degradability

- Product/ingredient name** **Result**
- Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated Aerobic - 4 mg/l 74.85% [28 days] - Aerobic - 4 mg/l
- Readily
- Conclusion/Summary** : Not available.
- [Product]**

| Product/ingredient name                                                  | Aquatic half-life | Photolysis | Biodegradability |
|--------------------------------------------------------------------------|-------------------|------------|------------------|
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated | -                 | -          | Readily          |

12.3 Bioaccumulative potential

| Product/ingredient name                                                  | LogP <sub>ow</sub> | BCF | Potential |
|--------------------------------------------------------------------------|--------------------|-----|-----------|
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated | 0.2                | 3.2 | Low       |

12.4 Mobility in soil

- Soil/water partition coefficient**
- Not available.

Results of PMT and vPvM assessment

| Product/ingredient name                                                  | PMT | P   | M   | T  | vPvM | vP  | vM  |
|--------------------------------------------------------------------------|-----|-----|-----|----|------|-----|-----|
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated | No  | N/A | N/A | No | N/A  | N/A | N/A |

- Mobility** : Not available.
- Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

PolyEthylene Oxide Standard

SECTION 12: Ecological information

According to the results of its assessment, this substance is not a PBT or a vPvB.

Regulation (EC) No. 1272/2008 [CLP]

| Product/ingredient name                                                  | PBT | P   | B  | T  | vPvB | vP  | vB |
|--------------------------------------------------------------------------|-----|-----|----|----|------|-----|----|
| Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated | No  | N/A | No | No | No   | N/A | No |

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.  
Regulation (EC) No. 1272/2008 [CLP]

12.6 Endocrine disrupting properties

Conclusion/Summary : The product does not meet the criteria to be considered as having endocrine disrupting  
[Product] properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. The generation of waste should be avoided or minimised wherever possible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.  
Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.  
Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

|                                 | ADR/RID        | IMDG           | IATA           |
|---------------------------------|----------------|----------------|----------------|
| 14.1 UN number or ID number     | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper shipping name    | -              | -              | -              |
| 14.3 Transport hazard class(es) | -              | -              | -              |
| 14.4 Packing group              | -              | -              | -              |
| 14.5 Environmental hazards      | No.            | No.            | No.            |

SECTION 14: Transport information

Additional information

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

None of the components are listed / The components are not impacted by a restriction

**Labelling** : Not applicable.

Other EU regulations

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

**Australia** : This material is listed or exempted.

**Canada** : This material is listed or exempted.

**China** : This material is listed or exempted.

**Eurasian Economic Union** : **Russian Federation inventory:** This material is listed or exempted.

**PolyEthylene Oxide Standard****SECTION 15: Regulatory information**

|                          |                                                                                                                                              |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Japan</b>             | : <b>Japan inventory (CSCL):</b> This material is listed or exempted.<br><b>Japan inventory (ISHL):</b> This material is listed or exempted. |
| <b>New Zealand</b>       | : This material is listed or exempted.                                                                                                       |
| <b>Philippines</b>       | : This material is listed or exempted.                                                                                                       |
| <b>Republic of Korea</b> | : This material is listed or exempted.                                                                                                       |
| <b>Taiwan</b>            | : This material is listed or exempted.                                                                                                       |
| <b>Thailand</b>          | : This material is listed or exempted.                                                                                                       |
| <b>Turkey</b>            | : This material is listed or exempted.                                                                                                       |
| <b>United States</b>     | : This material is active or exempted.                                                                                                       |
| <b>Viet Nam</b>          | : This material is listed or exempted.                                                                                                       |

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Abbreviations and acronyms</b> | : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway<br>ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road<br>ATE = Acute Toxicity Estimate<br>B = Bioaccumulative<br>BCF = Bioconcentration Factor<br>CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]<br>DMEL = Derived Minimal Effect Level<br>DNEL = Derived No Effect Level<br>EUH statement = CLP-specific Hazard statement<br>IATA = International Air Transport Association<br>IMDG = International Maritime Dangerous Goods<br>IMO = International Maritime Organization<br>M = Mobile<br>N/A = Not available<br>P = Persistent<br>PBT = Persistent, Bioaccumulative and Toxic<br>PMT = Persistent, Mobile and Toxic<br>PNEC = Predicted No Effect Concentration<br>RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail<br>RRN = REACH Registration Number<br>SGG = Segregation Group<br>T = Toxic<br>vB = Very Bioaccumulative<br>vM = Very Mobile<br>vP = Very Persistent<br>vPvB = Very Persistent and Very Bioaccumulative<br>vPvM = Very Persistent and Very Mobile |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

| <b>Classification</b> | <b>Justification</b> |
|-----------------------|----------------------|
| Not classified.       |                      |

**Full text of abbreviated H statements**

Not applicable.

**Full text of classifications [CLP/GHS]**

Not applicable.

SECTION 16: Other information

Date of issue/ Date of revision : 03/09/2026

Date of previous issue : 16/10/2023

Version : 2

Notice to reader

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