

## Material Safety Data Sheet Polyethylene Glycol

### Section 1 - Product Identification

Synonym : PEG  
Chemical Formula :  $\text{HO}(\text{CH}_2\text{CH}_2\text{O})_n\text{H}$   
Company Identification : Tradeasia International Pte. Limited  
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### Section 2 – Hazards Identification

#### 2.1. Classification

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### 2.2. Label elements

##### Symbols/Pictograms

Not applicable

##### Signal Word

Not applicable

##### Hazard Statements

Not applicable

##### Precautionary Statements Storage

Not applicable

#### 2.3. Other hazards

##### Results of PBT and vPvB assessment

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

#### 2.4. Potential Acute Health Effects:

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

##### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition

### Section 3 – Composition/Information on Ingredients

#### 3.1 Composition comments

Chemical Name	EC No/CAS No	Purity, %
Polyethylene glycol	25322-68-3	100

## Section 4 – First-Aid Measures

### 4.1. Description of first aid measures

#### Eyes

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

#### Skin

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs, seek medical advice.

#### Ingestion

Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs, give further water. Seek medical advice.

#### Inhalation

Remove the victim from area exposure to avoid becoming a casualty. Seek medical advice if effects persist.

### 4.2. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No known specific antidote.

## Section 5 – Fire Fighting Measures

### 5.1. Suitable Extinguishing media

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

### 5.2. Specific hazards arising from the chemical

Combustible liquid.

### 5.3. Precautions for Firefighters and Special Protective Equipment:

On burning, it emits toxic fumes including those of oxides of carbon. Firefighters shall wear self contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

## Section 6 – Accidental Release Measures

### 6.1. Emergency procedures

If contamination of sewers or waterways has occurred advise local emergency services.

### 6.2. Methods and materials for containment and clean up

Slippery when spilled. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Contain - prevent run off into drains and waterways. Collect and seal in properly labelled containers or drums for disposal. For large amounts, pump off product.

## Section 7 – Handling and Storage

**Classified as a C2 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.**

#### **7.1. Precautions for safe Handling**

Avoid skin and eye contact.

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

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

### **Section 8 – Exposure Controls/Personal Protection**

#### **8.1. Occupational Exposure Limits:**

No value assigned for this specific material by the National Occupational Health and Safety Commission.

#### **8.2. Appropriate engineering controls**

Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

#### **8.3. Individual protection measures, such as personal protective equipment (PPE)**

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

### **Section 9 – Physical and Chemical Properties**

#### **9.1. Information on basic physical and chemical properties**

Physical State: Liquid

Appearance: Colorless

Odor: Odorless.

pH: 5-7.

Viscosity: 105-120 mm<sup>2</sup>/s @20°C (Kinematic)

Vapor Pressure: Not available.

Vapor Density: Not available.

Flash Point: >250 °C

Flammability Limits (%): Not available.

Autoignition Temperature: >200 °C

Viscosity: Not available.

Boiling Point: Not available.

Solubility: Immiscible with aliphatic hydrocarbons. Miscible with water and most organic solvents.

Specific Gravity/Density: 1.13 @ 20°C

Partition Coefficient: log Pow = -3.39

### **Section 10 – Stability and Reactivity**

#### **10.1. Chemical stability**

Not available.

#### **10.2. Possibility of hazardous reactions**

No hazardous reactions when stored and handled correctly.

#### **10.3. Conditions to avoid:**

Avoid exposure to humidity.

#### **10.4. Incompatible materials**

Incompatible with atmospheric moisture.

#### **10.5. Hazardous decomposition products**

Oxides of carbon.

### **Section 11 – Toxicological Information**

#### **11.1 Health effects associated with ingredients**

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** No adverse effects expected, however, large amounts may cause nausea and vomiting.

**Eye contact:** May be an eye irritant.

**Skin contact:** Repeated or prolonged skin contact may lead to irritation.

**Inhalation:** Breathing in vapour may produce respiratory irritation.

**Long Term Effects:** No information available for the product.

#### **Toxicological Data:**

Oral LD50 (rat): > 2000 mg/kg

SKIN: Non-irritant (rabbit).

EYES: Non-irritant (rabbit).

### **Section 12 – Ecological Information**

#### **12.1. Ecotoxicity**

Avoid contaminating waterways.

#### **12.2. Persistence/degradability and mobility**

The material is readily biodegradable. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

#### **12.3. DOC Removal**

>70%

#### **12.4. Aquatic toxicity**

For similar products : 96hr LC50 (fish): >100 mg/L (*Leuciscus idus*)

### **Section 13 – Disposal Considerations**

### 13.1. Disposal methods

Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Normally suitable for incineration by an approved agent.

## Section 14 – Transport Information

### 14.1. Road and Rail Transport

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

### 14.2. Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

### 14.3. Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

## Section 15 – Regulatory Information

### 15.1. Safety, health and environmental regulations

#### Classification:

Based on available information, not classified as hazardous according to criteria of Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

#### Poisons Schedule:

None allocated.

## Section 16 : Additional Information

### 16.1. List of abbreviation and acronyms used in this MSDS

**SDS** : Safety Data Sheets

**Index N°** : atomic number of the element most characteristic of the properties of the substance

**CAS No** : Chemical Abstracts Service number

**EC No** : EINECS Number : European Inventory of Existing Commercial Substances

**Repr. Cat. 2** : Substance presumed human reproductive toxicant

**Acute Oral Cat. 5** : Substance which is of relatively low acute oral toxicity.

**GHS** : Globally Harmonised System of Classification and Labelling

**LD<sub>50</sub>** : Median Lethal Dose

**LC<sub>50</sub>** : Lethal Concentration, 50%

**N.A.** : Not Applicable

**OSHA** : Occupational Safety & Health Administration

**Cal OSHA** : The State of California Division of Occupational Safety and Health (DOSH)

**PEL** : Permissible Exposure Limits

**ACGIH** : American Conference of Governmental Industrial Hygienists

**TLV** : Threshold Limit Value

**Japanese MITI** : Japanese Ministry of International Trade and Industry

**EC<sub>50</sub>** : Half maximal effective concentration

**UN** : United Nations

**U.S. EPA TSCA Inventory:** Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the authority of the Environmental Protection Agency

**Canadian DSL:** Canadian Domestic Substances List

## **16.2. Disclaimer of Liability**

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