

**SAFETY DATA SHEET**  
according to Regulation (EC) No. 1907/2006

## POLYGLYCEROL-4

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1. Identification of the substance or preparation

Product name : POLYGLYCEROL-4  
Synonyms : PGLC-4, Polyglycerol, Polyglycerin-4  
Molecular formula : HO(C<sub>3</sub>H<sub>6</sub>O)<sub>x</sub>H

#### 1.2. Use of the Substance/Preparation

Recommended use : - Chemical industry  
- Cosmetics

#### 1.3. Company/Undertaking Identification

Address : SOLVAY CHEMICALS INTERNATIONAL SA  
RUE DU PRINCE ALBERT, 44  
B- 1050 BRUXELLES

Telephone : +3225096111

Telefax : +3225096624

#### 1.4. Emergency and contact telephone numbers

Emergency telephone : +44(0)208 762 8322 [CareChem 24] (Europe)  
GB: +44-1925-651277 (Product information)

E-mail address : [sdstracking@solvay.com](mailto:sdstracking@solvay.com)

### 2. HAZARDS IDENTIFICATION

Appearance : paste, viscous  
Colour : light yellow  
Odour : odourless

- Substance non classified according to Directive 67/548/EEC.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name (CAS-No. / EC-No. / Annex-1)	Concentration (W/W)	Classification	R-phrase(s)
<b>Polyglycerin</b> (25618-55-7 / Exempt or not available / Exempt or not available )	<b>&gt; 75 %</b>		



## 4. FIRST AID MEASURES

### 4.1. Inhalation

- No hazards which require special first aid measures.

### 4.2. Eye contact

- Rinse thoroughly with plenty of water, also under the eyelids.

### 4.3. Skin contact

- Wash off with plenty of water.

### 4.4. Ingestion

- If a large amount is swallowed, get medical attention.

#### *If victim is conscious:*

- If swallowed, rinse mouth with water (only if the person is conscious).

#### *If victim is unconscious but breathing:*

- not applicable

## 5. FIRE-FIGHTING MEASURES

### 5.1. Suitable extinguishing media

- Water
- Water spray
- Carbon dioxide (CO<sub>2</sub>)
- Foam, AFFF
- Dry powder

### 5.2. Extinguishing media which shall not be used for safety reasons

- None.

### 5.3. Special exposure hazards in a fire

- Combustible material
- Heating can release hazardous gases.
- Vapours may form explosive mixtures with air.

### 5.4. Special protective equipment for fire-fighters

- Evacuate personnel to safe areas.
- In the event of fire, wear self-contained breathing apparatus.

### 5.5. Other information

- Cool containers / tanks with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions

- Refer to protective measures listed in sections 7 and 8.

### 6.2. Environmental precautions

- Should not be released into the environment.

### 6.3. Methods for cleaning up

- Dam up.
- Soak up with inert absorbent material.
- Prevent product from entering drains.
- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".



## 7. HANDLING AND STORAGE

### 7.1. Handling

- No special handling advice required.

### 7.2. Storage

- Keep away from incompatible products
- To maintain product quality, do not store in heat or direct sunlight.

### 7.3. Specific use(s)

- For further information, please contact: Supplier

### 7.4. Other information

- Keep away from open flames, hot surfaces and sources of ignition.
- Do not smoke.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Exposure Limit Values

#### Polyglycerin

- US. ACGIH Threshold Limit Values  
Remarks: none established

### 8.2. Exposure controls

- Ensure adequate ventilation.
- Refer to protective measures listed in sections 7 and 8.

#### 8.2.1. Occupational exposure controls

##### 8.2.1.1. *Respiratory protection*

- No personal respiratory protective equipment normally required.
- In case of insufficient ventilation, wear suitable respiratory equipment.

##### 8.2.1.2. *Hand protection*

- Protective gloves
- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Suitable material : PVC

##### 8.2.1.3. *Eye protection*

- If splashes are likely to occur, wear:
  - Goggles
  - Face-shield

##### 8.2.1.4. *Skin and body protection*

- Wear suitable protective clothing.

##### 8.2.1.5. *Hygiene measures*

- When using do not eat, drink or smoke.
- Handle in accordance with good industrial hygiene and safety practice.

#### 8.2.2. Environmental exposure controls

- Dispose of rinse water in accordance with local and national regulations.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. General Information (appearance, odour)

**Appearance** : paste, viscous



**Colour** : light yellow

**Odour** : odourless

## 9.2. Important health safety and environmental information

**pH** : 5 - 6  
*Concentration: 100 g/l*  
*Temperature: 20 °C*

**Boiling point/boiling range** : 205 °C (Diglycerol)  
*Pressure: 1.3 hPa*

**Flash point** : ca. 260 °C  
*Remarks: Combustible material*  
*Method: open cup*

**Flammability** : *Remarks: not applicable*

**Explosive properties** : *Explosion danger.*  
*Remarks: Vapours may form explosive mixture with air. (Glycerol)*

**Vapour pressure** : < 1 hPa  
*Temperature: 20 °C*

**Relative density / Density** : 1.28  
*Temperature: 25 °C*

**Solubility** : Soluble in:  
: Water  
: Alcohol

**Partition coefficient: n-octanol/water** : *log Pow:*  
-1.76 (Glycerol)

**Viscosity** : ca. 25,000 mPa.s  
*Temperature: 40 °C*

**Vapour density** : *Remarks: no data available*

## 9.3. Other data

**Auto-flammability** : ca. 400 °C

# 10. STABILITY AND REACTIVITY

## 10.1. Stability

- Stable under recommended storage conditions.

## 10.2. Conditions to avoid

- To avoid thermal decomposition, do not overheat.
- Heat, flames and sparks.

## 10.3. Materials to avoid

- Oxidizing agents, Products which react with alcohols

## 10.4. Hazardous decomposition products

- Carbon monoxide, Acrolein (traces)



## 11. TOXICOLOGICAL INFORMATION

### 11.1 Toxicological data

#### **Acute oral toxicity**

- LD50, rat, > 2,000 mg/kg

#### **Skin irritation**

- rabbit, No skin irritation

#### **Eye irritation**

- rabbit, No eye irritation

#### **Sensitisation**

- guinea pig, Did not cause sensitization on laboratory animals.

#### **Chronic toxicity**

- Prolonged exposure, Target Organs: gastro-intestinal system, irritant effects, (Glycerol)
- Repeated exposure, no systemic effect, (Glycerol)

#### **Possible hazards (summary)**

- Health injuries are not known or expected under normal use.
- In vitro tests did not show mutagenic effects, (Glycerol)

### 11.2. Health effects

#### **Inhalation**

- No adverse effects are normally expected.

#### **Eye contact**

- No adverse effects are normally expected.

#### **Skin contact**

- No adverse effects are normally expected.

#### **Ingestion**

- No reported cases of intoxication in man.
- Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

## 12. ECOLOGICAL INFORMATION

### 12.1. Ecotoxicity effects

#### **Acute toxicity**

- Fishes, *Poecilia reticulata*, LC50, 96 h, > 1,000 mg/l (PGLC-3)
- Fishes, *Poecilia reticulata*, NOEC, 96 h, > 1,000 mg/l (PGLC-3)
- Crustaceans, *Daphnia magna*, LC50, 48 h, > 10,000 mg/l (PGLC-3)
- Crustaceans, *Daphnia magna*, NOEC, 48 h, 1,000 mg/l (PGLC-3)

#### **Chronic toxicity**

- Algae, *Selenastrum capricornutum*, EC50, 96 h, > 1,000 mg/l (PGLC-3)
- Algae, *Selenastrum capricornutum*, NOEC, 96 h, 1,000 mg/l (PGLC-3)

### 12.2. Mobility

- Remarks: no data available

### 12.3. Persistence and degradability

#### **Abiotic degradation**

- Result: no data available

#### **Biodegradation**

- aerobic, Tested according to: Modified Sturm Test, Chemical degradation > 60 %, 28 d (PGLC-3)  
Remarks: Inherently biodegradable.

### 12.4. Bioaccumulative potential

- Bioconcentration: log Pow = -1.76, (Glycerol)  
Result: non-suspected bioaccumulation



**12.5. Other adverse effects**

- no data available

**12.6. Possible hazards (summary)**

- Ecological injuries are not known or expected under normal use.

**13. DISPOSAL CONSIDERATIONS****13.1. Waste from residues / unused products**

- In accordance with local and national regulations.
- The organic ingredients can be biodegraded in a sewage plant after neutralization.
- or
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

**13.2. Packaging treatment**

- Rinse the empty containers with a low volatility hydrocarbon and treat the effluent in the same way as waste.
- or
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
- The empty and clean containers are to be reused in conformity with regulations.

**14. TRANSPORT INFORMATION**

- Sea (IMO/IMDG)
- not regulated
- Air (ICAO/IATA)
- not regulated
- European Road/Rail (ADR/RID)
- not regulated

**15. REGULATORY INFORMATION****15.1. EC Label**

- Substance non classified according to Directive 67/548/EEC.

**15.2. Inventory Information**

<b>Toxic Substance Control Act list (TSCA)</b>	: -	In compliance with inventory.
<b>Australian Inventory of Chemical Substances (AICS)</b>	: -	In compliance with inventory.
<b>Canadian Domestic Substances List (DSL)</b>	: -	In compliance with inventory.
<b>Inventory of Existing Chemical Substances (China) (IECS)</b>	: -	In compliance with inventory.
<b>EU list of existing chemical substances (EINECS)</b>	: -	In compliance with inventory.
<b>Japanese Existing and New Chemical Substances (MITI List) (ENCS)</b>	: -	In compliance with inventory.
<b>Korean Existing Chemicals List (ECL)</b>	: -	In compliance with inventory.



<b>New Zealand Inventory of Chemicals (NZIOC)</b>	: -	In compliance with inventory.
<b>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</b>	: -	In compliance with inventory.

## 16. OTHER INFORMATION

### 16.1. Administrative information

- General revision
- Distribute new edition to clients

This SDS is only intended for the indicated country to which it is applicable. The European SDS format compliant with the applicable European legislation is not intended for use nor distribution in countries outside the European Union with the exception of Norway and Switzerland. Safety datasheets applicable in other countries/regions are available upon request.

The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. This applies to product which conforms to the specification, unless otherwise stated. In this case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.

