

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

### 1.1 Product identifiers

Product name: **Propane 1,2,3 Triol (Glycerol)**

CAS-No.: **56-81-5**

Product Number: **F77200**

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

Identified uses: Laboratory chemicals, Manufacture of substances

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

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

### 1.4 Emergency telephone number

Emergency Phone #: **+44 (0)845 1200 506**

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008; Eye irritation (Category 2)

This substance is not classified as dangerous according to Directive 67/548/EEC.

### 2.2 Label elements



Pictogram

Signal word

Warning

**Hazard statement(s):** H319 Causes serious eye irritation.

**Precautionary statement(s):** P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

### 2.3 Other hazards – no data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

**Glycerol (Synonyms : 1,2,3-Propanetriol Glycerin)**

Formula: **CH<sub>2</sub>OHCHOHCH<sub>2</sub>OH**

Molecular Weight: **92.09**

CAS-No.: **56-81-5**

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed:** no data available

**4.3 Indication of immediate medical attention and special treatment needed:** no data available

**5. FIRE-FIGHTING MEASURES****5.1 Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture:** no data available

**5.3 Precautions for fire-fighters:** Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information:** no data available

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

**6.2 Environmental precautions:** Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up:** Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections:** For disposal see section 13.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

**7.2 Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Store in cool place. hygroscopic

**7.3 Specific end uses:** no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Glycerol	56-81-5	TWA	10mg/m <sup>3</sup>	2005-04-06

UK. EH40 WEL - Workplace Exposure Limits. Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

### 8.2 Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

**Eye/face protection:** Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance:                      **Form:** Liquid                      **Colour:** Clear
- b) Odour:                                      Odourless
- c) Odour Threshold:                      no data available
- d) pH:    pH 5.5 - 8
- e) Melting/freezing point:              20 °C                      Melting point/range: no data available
- f) Initial boiling point and boiling range: 182 °C at 27 hPa
- g) Flash point:                              160 °C - closed cup
- h) Evaporation rate:                      no data available
- i) Flammability (solid, gas):              no data available
- j) Upper/lower flammability or explosive limits: 0.9%(V)

- k) Vapour pressure: 0.0033 hPa at 50 °C  
l) Vapour density: 3.18 - (Air = 1.0)  
m) Relative density: 1.25 g/mL  
n) Water solubility: Soluble  
o) Partition coefficient: n-octanol/water: no data available  
p) Autoignition temperature: 370 °C  
q) Decomposition temperature: no data available  
r) Viscosity: no data available  
s) Explosive properties: no data available  
t) Oxidizing properties: no data available

**9.2 Other safety information:** no data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** no data available

**10.2 Chemical stability:** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions:** no data available

**10.4 Conditions to avoid:** no data available

**10.5 Incompatible materials:** Strong bases, Strong oxidizing agents

**10.6 Hazardous decomposition products:** formed under fire conditions. - Carbon oxides

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity:** LD50 Oral - rat - 12,600 mg/kg

LD50 Dermal - rabbit - > 10,000 mg/kg

**Skin corrosion/irritation:** Skin - rabbit - Mild skin irritation - 24 h

**Serious eye damage/eye irritation:** Eyes - rabbit - Mild eye irritation - 24 h

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** Causes eye irritation.

**Signs and Symptoms of Exposure:** no data available

**Additional Information:** RTECS: MA8050000

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:** Toxicity to fish LC50 - *Carassius auratus* (goldfish) - > 5,000 mg/l

LC50 - *Pimephales promelas* (fathead minnow) - 44,000 mg/l

LC50 - other fish - > 100,100 mg/l

LC50 - *Oncorhynchus mykiss* (rainbow trout) - 67,500 mg/l - 96 h

**12.2 Persistence and degradability:** no data available

**12.3 Bioaccumulative potential:** no data available

**12.4 Mobility in soil:** no data available

**12.5 Results of PBT and vPvB assessment:** no data available

**12.6 Other adverse effects:** no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product:** Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging:** Dispose of as unused product.

## 14. TRANSPORT INFORMATION

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:** no data available

**15.2 Chemical Safety Assessment:** no data available

## 16. OTHER INFORMATION

Eye Irrit. Eye irritation

H319 Causes serious eye irritation.