



SAFETY DATA SHEET

GLYCERINE

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Compilation date: 15/03/11

Revision No: 3

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

1.1. Product identifier

Product name: GLYCERINE

CAS number: 56-81-5

EINECS number: 200-289-5

Synonyms: 1,2,3 PROPANETRIOL

GLYCEROL

GLYCYL ALCOHOL

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

Use of substance / mixture: Anti-freezing Agent. Chemical Intermediate. Chemical manufacturing. Food Additive.
Personal care products. Plasticiser. Solvent.

1.3. Details of the supplier of the safety data sheet

Company name: Monarch Chemicals Limited

New Road

Sheerness

Kent

ME12 1LZ

United Kingdom

Tel: 01795 583333 (09:00 - 17:00 Mon-Fri)

Fax: 01795 583300

Email: sales@monarchchemicals.co.uk

1.4. Emergency telephone number

Emergency tel: 07711 009064 (Out of Hours)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: This product has no classification under CLP.

2.2. Label elements

Label elements: This product has no label elements.

2.3. Other hazards

PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients

[cont...]

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3.1. Substances

Chemical identity: GLYCERINE

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. If irritation develops or persists seek medical attention.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: If conscious, wash the mouth out with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. If irritation develops or persists seek medical attention.

Inhalation: Not applicable under normal conditions of use. Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If symptoms develop seek medical attention.

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

Skin contact: * May cause mild irritation to areas of broken or sensitive skin.

Eye contact: * May cause mild irritation. Repeated exposure may cause chronic eye irritation.

Ingestion: * May cause mild irritation of the gastrointestinal tract if large quantities are ingested. Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: * Not applicable under normal conditions of use. Prolonged inhalation of mists may cause lung inflammation. May cause irritation of the mucous membranes and respiratory system.

Delayed / immediate effects: * Toxicological data is based on animal data. No symptoms.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: The product does not support combustion. In a fire may liberate acrid and irritant fumes. In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Acrolein.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

[cont...]

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Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear suitable protective clothing. Do not attempt to take action without suitable protective clothing - see section 8 of SDS.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amounts of water.

6.4. Reference to other sections

Reference to other sections: * Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Wear suitable protective clothing. Avoid the formation or spread of mists in the air. Avoid contact with the material. Causes slippery surface when spilled.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Protect from low temperatures and frost.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits:

Respirable dust

State	8 hour TWA:	15 min. STEL:	8 hour TWA:	15 min. STEL:
UK	10 mg/m ³ (mist)	-	-	-

8.2. Exposure controls

Engineering measures: Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: * Not normally required under normal conditions of use. Wear suitable respiratory protection when aerosols or mist are present. Particle filter class P1 (EN143).
Gas/vapour filter, type A: organic vapours (EN141).

Hand protection: Protective gloves.

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Eye protection: Safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing. Ensure safety shower is to hand.

Environmental: No special requirement.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: See other information.

Odour: Barely perceptible odour

Evaporation rate: Negligible

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Also soluble in: * Ethanol.

Viscosity: Viscous

Boiling point/range°C: ~ 290

Melting point/range°C: ~ 18

Flammability limits %: lower: * 2.6

upper: * 11.3

Flash point°C: ~ 160

Part.coeff. n-octanol/water: ~ -1.76/2.6

Autoflammability°C: ~ 400

Vapour pressure: < 0.1 hPa @ 20 oC

Relative density: ~ 1.26 g/ml @ 20 oC

pH: ~ 5 (100g/l Aqu)

9.2. Other information

Other information: EP & high purity grades of glycerine are generally colourless to pale yellow. Technical grade material can vary from colourless to dark brown dependent upon the specific grade.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat. Low temperatures and frost.

10.5. Incompatible materials

Materials to avoid: Oxidising agents. Halogens. Peroxides Nitric acid. Sulphuric acid. Hydrogen peroxide.

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10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Acrolein.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

Route	Species	Test	Value	Units
DERMAL	RBT	LD50	> 10000	mg/kg
ORAL	RAT	LD50	12600	mg/kg

Symptoms / routes of exposure

Skin contact: * May cause mild irritation to areas of broken or sensitive skin.

Eye contact: * May cause mild irritation. Repeated exposure may cause chronic eye irritation.

Ingestion: * May cause mild irritation of the gastrointestinal tract if large quantities are ingested.
Nausea and stomach pain may occur. There may be vomiting and diarrhoea.

Inhalation: * Not applicable under normal conditions of use. Prolonged inhalation of mists may cause lung inflammation. May cause irritation of the mucous membranes and respiratory system.

Delayed / immediate effects: * Toxicological data is based on animal data. No symptoms.

Other information: * Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
Daphnia magna	24H EC50	> 10,000	mg/l
Bacteria, Activated Sludge	48H	> 1000	mg/l
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	54000	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Product is not expected to bioaccumulate.

12.4. Mobility in soil

Mobility: Soluble in water. Non-volatile.

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12.5. Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Not expected to cause significant environmental impact. Do not allow to enter watercourses or soils. Spillage in sewers or waterways must be avoided.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: * Transfer to a suitable container and arrange for collection by specialised disposal company.

Disposal of packaging: Contaminated containers must not be treated as household waste. Where practical, containers and packaging should be recycled by a licenced contactor.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product is not classified for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: * This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

There are no levels set for this product thus normal standards of industrial hygiene should be observed.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.