

GLYCERINE

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Revision date: 14/10/2023

Revision No: 7

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

1.1. Product identifier

Product name: GLYCERINE

REACH registered number(s): EXEMPTION UNDER ANNEX V

CAS number: 56-81-5

EINECS number: 200-289-5

Synonyms: 1,2,3 PROPANETRIOL

GLYCEROL

GLYCYL ALCOHOL

INCI name: Glycerin

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. Animal Feed Processing.

1.3. Details of the supplier of the safety data sheet

Company name: Hexeal Chemicals Limited

Norwich Road Great Plumstead

Norfolk

NR13 5FW

United Kingdom

Tel: 01603 720202 (09:00 - 17:00 Mon-Fri)

Email: sales@hexchem.co.uk

1.4. Emergency telephone number

Emergency tel: 01603 720202 (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 product is not identified as a PBT/vPvB substance.

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Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: GLYCERINE (*WEL)

CAS number: 56-81-5 **EINECS number:** 200-289-5

REACH registered number(s): EXEMPTION UNDER ANNEX V

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and water. **Eye contact:** Bathe the eye with running water for 15 minutes.

Ingestion: * If conscious, wash the mouth out with water. Do not induce vomiting.

Inhalation: * Not applicable under normal conditions of use. Move to fresh air in case of accidental

inhalation of vapours. Consult a doctor.

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

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: * May cause mild irritation of the gastrointestinal tract if large quantities are ingested.

Inhalation: * Not applicable under normal conditions of use. Prolonged inhalation of mists may

cause lung inflamation.

Delayed / immediate effects: * Significant effects and/or symptoms are not anticipated.

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

Immediate / special treatment: * No special requirements.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: * Water spray. Carbon dioxide. Dry chemical powder. Alcohol resistant foam. Use water

spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: * In combustion emits toxic fumes of carbon dioxide / carbon monoxide. Acrolein. Keep

containers exposed to fire cool with waterspray.

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.

Section 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leakside up to prevent the escape of liquid.

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.

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 a cool, well ventilated area. Keep container tightly closed. Avoid contact with

water or humidity.

Suitable packaging: * Must only be kept in original packaging. Polyethylene. Stainless steel. Aluminium

containers.

7.3. Specific end use(s)

Specific end use(s): * No special requirement.

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)		-	•

Hazardous ingredients:

GLYCERINE

Workplace exposure limits:

Respirable dust

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

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DNEL/PNEC Values

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Туре	Exposure	Value	Population	Effect
DNEL	Oral (repeated dose)	229 mg/kg bw/day	Consumers	Systemic
DNEL	Inhalation (repeated dose)	33 mg/m3	Consumers	Local
DNEL	Inhalation (repeated dose)	56 mg/m3	Workers	Local
PNEC	Soil (agricultural)	0.141 mg/kg	-	-
PNEC	Microorganisms in sewage	1000 mg/l	-	-
	treatment			
PNEC	Fresh water	0.885 mg/l	-	-
PNEC	Intermittent Release	8.85 mg/l	-	-
PNEC	Marine water	0.0885 mg/l	-	-
PNEC	Fresh water sediments	3.3 mg/kg	-	-
PNEC	Marine sediments	0.33 mg/kg	-	-

Hazardous ingredients:

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PNEC	Microorganisms in sewage	1000 mg/l	-	-
	treatment			
PNEC	Fresh water	0.885 mg/l	-	-
PNEC	Intermittent Release	8.85 mg/l	-	-
PNEC	Marine water	0.0885 mg/l	-	-
PNEC	Fresh water sediments	3.3 mg/kg	-	-
PNEC	Marine sediments	0.33 mg/kg	-	-

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 if exposure levels approach or exceed the stated exposure levels. Wear

suitable respiratory protection when aerosols or mist are present. Gas/vapour filter, type A:

organic vapours (EN141). Particle filter class P2SL (EN143).

Hand protection: Protective gloves.

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

Skin protection: Protective clothing.

Environmental: No special requirement.

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Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: * See other information.Odour: * See other information.

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. EP & high purity grades of glycerine are normally found to have a barely

perceptible to mild odour. Tech 2 & Feed grade products generally have a organic type

odour which can vary from mild to strong.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

 $\textbf{Chemical stability:} \quad \text{``Stable under normal conditions. In case of elevated temperatures (> 200oC) there is a }$

risk of exothermic polymerisation.

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. On contact with strong oxidising substances like nitric acid or other strong acids, explosive

reactions may be possible.

10.4. Conditions to avoid

Conditions to avoid: Heat.

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10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

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	> 18700	mg/kg
DERMAL	GPG	LD50	56750	mg/kg
ORAL	GPG	LD50	11500	mg/kg
ORAL	MUS	LD50	~ 23000	mg/kg
ORAL	RAT	LD50	27200	mg/kg

Hazardous ingredients:

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DERMAL	GPG	LD50	56750	mg/kg
DERMAL	RBT	LD50	> 18700	mg/kg
ORAL	GPG	LD50	11500	mg/kg
ORAL	MUS	LD50	~ 23000	mg/kg
ORAL	RAT	LD50	27200	mg/kg

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: * May cause mild irritation of the gastrointestinal tract if large quantities are ingested.

Inhalation: * Not applicable under normal conditions of use. Prolonged inhalation of mists may

cause lung inflammation.

Delayed / immediate effects: * Significant effects and/or symptoms are not anticipated.

Other information: * There is no further information at this time.

Section 12: Ecological information

12.1. Toxicity

* Ecotoxicity values:

Species Test Value Units

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Daphnia magna	48H LC50	1955	mg/l
Bacteria, Activated Sludge	48H	> 1000	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	54000	mg/l
Pimephales promelas	96H LC50	885	mg/l
Carrassius auratus	24H LC50	> 5000	mg/l
Scenedesmus quadricauda	8D EC3	> 10000	mg/l

Hazardous ingredients:

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Carrassius auratus	24H LC50	> 5000	mg/l
Pimephales promelas	96H LC50	885	mg/l
Scenedesmus quadricauda	8D EC3	> 10000	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	54000	mg/l
Bacteria, Activated Sludge	48H	> 1000	mg/l
Daphnia magna	48H LC50	1955	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: * There is no evidence of bioaccumulation.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: * Not expected to cause significant environmental impact. Considered to be slightly

hazardous to water. 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.

Recovery operations: No information available at this time.

Disposal of packaging: Contaminated containers must not be treated as household waste. Where practical,

containers and packaging should be recycled by a licensed contractor.

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

regulations regarding disposal.

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Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: * Exemption from registration under REACH in accordance with Annex V. Commission Decision 96/335/EC establishing an inventory and a common nomenclature of ingredients employed in cosmetic products (INCI). Council Directive 76/768/EEC on the approximation of the laws of the Member States relating to cosmetic products. Regulation (EC) No 1223/2009 of the European Parliament and of the Council on cosmetic products. Toy Safety Directive 2009/48/EC of the European Parliament and of the Council on toy products. The product use may be controlled under the TPD - Tobacco Products Directive (2014/40/EU). Product is listed on IOFI (International Organization of the Flavor Industry) Global Reference List - Flavouring sector list. Product is listed on IFRA (International Fragrance Association) Transparency List - Fragrance sector list.

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. Due to the hazard classification a chemical safety report (CSR) is not required for this product.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* 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.