

SAFETY DATA SHEET GLYCERINE

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

1.1. Product identifier

Product name	GLYCERINE
Product number	20124
Synonyms; trade names	GLYCEROL, GLYCYL ALCOHOL, 1,2,3 PROPANETRIOL, PRICERINE, GLYCAMED, GLYCERINE 99.5% VEG, GLYCERINE MIN 99.5% PH, GLYCERINE VEG, GLYCERINE VEG FG/PH NCM, GLYCERINE VEG KOSHER FG/PH, GLYCERINE VEG KOSHER FG/PH UNR, GLYCERINE VEGETABLE 99.7%, PALMERA G995E, GLYCERIN SYNT. USP/EP 99.7%, GLYCERIN 99.5% VEG. PH EUR, GLYCEROL E422 99.5% VEG., GLYCERIN 86.5% VEG, GLYCERIN 99,5%, VEGETABILISK, GLYCERIN MIN 99,5%, GLYCERIN MIN 99,5%, EUR PH, GLYCERIN MIN 99,5% USP, GLYCERIN PHARMA 85%, GLYCEROL E 422 86,5% VEG, GLYCEROL E 422 99,5% VEG SANTA MARIA, GLYCERINE VEG FG/PH KOSH NCM, GLYCERINE VEG FG/PH KSH REFNCM, GLYCERINE VEGETABLE 99.8%, PALMERA G995V, GLYCEROL 2, GLYCERINE 4813, GLYCERINE 4810, Kollisolv G99, GLYCERINE TECH VEG/ANIMAL, GLYCERINE PH EUR 86.5 %, PALMERA G995T, GLYCERINE 99.7%, GLYCERINE TECH GRADE, GLYCERINE FCC ED. 7, GLYCERINE 99.5% TECHNICAL, GLYCEROL 99.5% VEG, GLYCERINE ROO, MOON OU GLYCERINE, SUPEROL KPO GLYCERIN, GLYCAMED 99.7% KOSHER, GLYCERINE 4827, GLYCERINE VEG FG/PH 4808K, GLYCERINE 4810 K, GLYCERINE 4811, GLYCERINE USP-EP 99,7%, GLYCERINE 4811K, GLYCAMED 99.7%, GLYCERINE VEG 86.5% DEMIN, E-GLYCERIN FG KOSHER, GLYCERINE VEG FG/PH KOSHER, GLYCERINE USP/FCC KSH VNY
REACH registration number	01-2119471987-18-XXXX
CAS number	56-81-5
EC number	200-289-5

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

Identified uses Industrial application Cosmetics Pharmaceuticals Food industry

1.3. Details of the supplier of the safety data sheet

Supplier
Darrant Distribution LTD
Unit 1 Witham Point
Wavell Drive
Lincoln
LN3 4PL
+44 1522 533244
sales@darrantch
emicals.com

1.4. Emergency telephone number

Emergency telephone 01522 533244

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

EC number	200-289-5
Hazard statements	NC Not Classified

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	GLYCERINE
REACH registration number	01-2119471987-18-XXXX
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EC number	200-289-5

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	Gas or vapour in high concentrations may irritate the respiratory system.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

DNEL Industry - Inhalation; Long term local effects: 56 mg/m³

PNEC

- Fresh water; 0.885 mg/l
- Marine water; 0.0885 mg/l
- Intermittent release; 8.85 mg/l
- STP; 1000 mg/l
- Soil; 0.141 mg/kg
- Sediment (Freshwater); 3.3 mg/kg
- Sediment (Marinewater); 0.33 mg/kg

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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles. EN 166

Hand protection

Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. EN 374

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

In case of inadequate ventilation or when the product is heated, use suitable respiratory equipment with gas filter (type A2). EN 136/140/145/143/149

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colourless. Yellow. Orange.
Odour	No information available.
Odour threshold	No information available.
pH	pH (concentrated solution): 5 - 8
Melting point	~ 18°C
Initial boiling point and range	290°C @ 760 mm Hg
Flash point	> 199°C PMCC (Pensky-Martens closed cup).
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	< 1 Pa @ 20°C
Vapour density	No information available.
Relative density	1.26 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water. Soluble in the following materials: Ethanol. acetone
Partition coefficient	log Pow: -1.76
Auto-ignition temperature	370°C
Decomposition Temperature	No information available.

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Viscosity	1300 - 1500 mPa s @ 20°C
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.
9.2. Other information	
Other information	No information required.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Oxidising materials. Acids.

10.2. Chemical stability

Stability The substance is hygroscopic and will absorb water by contact with the moisture in the air.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No information available.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Water, moisture.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 27,200.0

Species Rat

ATE oral (mg/kg) 27,200.0

Skin corrosion/irritation

Animal data No information available.

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Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact No specific health hazards known.

Eye contact May cause temporary eye irritation.

SECTION 12: Ecological Information

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute toxicity - fish LC50, 96 hours: 54000 mg/l, *Onchorhynchus mykiss* (Rainbow trout)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: > 10000 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants EC₅₀, 72 hours: > 2900 mg/l, Freshwater algae

Acute toxicity - microorganisms EC₅₀, : > 1000 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

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Partition coefficient log Pow: -1.76

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

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EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
 Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
 Commission Regulation (EU) No 2015/830 of 28 May 2015.

Inventory Information EINECS TSCA AICS DSL ECL ENCS IECS NZIOC PICCS

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

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Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
Key literature references and sources for data	Supplier's information.
Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	27/07/2017
Revision	15
Supersedes date	04/07/2017
SDS number	20124
Version number	1.010
SDS status	Approved.
Signature	Lisa Bland