

SAFETY DATA SHEET
GLYCEROL LRG

According to Regulation (EC) No 1907/2006, Annex II

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product name	GLYCEROL LRG
Product number	1443
REACH registration number	01-2119471987-18-0000
CAS number	56-81-5
EC number	200-289-5
Formula	HOCH ₂ CH(OH)CH ₂ OH

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

Identified uses	Lubricant. Cleaning agent. Hand cleaner. Laboratory reagent.
Uses advised against	No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet**Supplier**

Reagent Chemical Services
18 Aston Fields Road
Whitehouse Industrial Estate
Runcorn
Cheshire WA7 3DL

T: 01928 716903 (08.30 - 17.00)
F: 01928 716425
E: info@reagent.co.uk

1.4. Emergency telephone number

Emergency telephone	OHES Environmental Ltd 24-7 Tel. 0333 333 9939 (24 hour)
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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

Classification (67/548/EEC or -
1999/45/EC)

2.2. Label elements

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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	GLYCEROL LRG
REACH registration number	01-2119471987-18-0000
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EC number	200-289-5

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Remove affected person from source of contamination.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if any discomfort continues.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Do not rub eye. Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if any discomfort continues.

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

General information	The product is considered to be a low hazard under normal conditions of use. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	May cause irritation.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	May be slightly irritating to skin.
Eye contact	May cause eye irritation.

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

Notes for the doctor	Treat symptomatically.
Specific treatments	No specific chemical antidote is known to be required after exposure to this product.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire. Water spray, foam, dry powder or carbon dioxide.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

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Specific hazards	The product is not flammable. When handled correctly, undamaged units represent no danger.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Carbon dioxide (CO ₂). Carbon monoxide (CO).
5.3. Advice for firefighters	
Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Environmental precautions	No negative effects on the aquatic environment are known. Avoid the spillage or runoff entering drains, sewers or watercourses.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. To prevent release, place container with damaged side up. Take care as floors and other surfaces may become slippery. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Absorb in vermiculite, dry sand or earth and place into containers. Dispose of waste via a licensed waste disposal contractor. Wash thoroughly after dealing with a spillage.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Do not get in eyes, on skin, or on clothing. Avoid spilling.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Good personal hygiene procedures should be implemented. Wash after use and before eating, smoking and using the toilet.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions	Store in tightly-closed, original container in a dry and cool place. Protect from freezing and direct sunlight. Store away from the following materials: Strong acids. Strong alkalis.
Storage class	Chemical storage.

7.3. Specific end use(s)

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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SECTION 8: Exposure Controls/personal protection

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8.1. Control parameters

Occupational exposure limits

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

WEL = Workplace Exposure Limit

DNEL

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

Consumer - Inhalation; Long term local effects: 33 mg/m³

Consumer - Oral; Long term systemic effects: 229 mg/kg/day

PNEC

- Fresh water; 0.885 mg/l

- Marine water; 0.0885 mg/l

- Intermittent release; 8.85 mg/l

- STP; 1000 mg/l

- Sediment (Freshwater); 3.3 mg/kg

- Sediment (Marinewater); 0.33 mg/kg

- Soil; 0.141 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation and appropriate extraction when vapours or mists are generated

Eye/face protection

Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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. To protect hands from chemicals, gloves should comply with European Standard EN374. For exposure up to 8 hours, wear gloves made of the following material: Neoprene. Nitrile rubber. Polyvinyl chloride (PVC). Thickness: ≥ 0.2 mm

Other skin and body protection

No specific requirements are anticipated under normal conditions of use.

Hygiene measures

Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Wash at the end of each work shift and before eating, smoking and using the toilet. Take off contaminated clothing and wash it before reuse.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a respirator fitted with the following cartridge: Particulate filter, type P2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Check that the respirator fits tightly and the filter is changed regularly.

Environmental exposure controls

Store in a demarcated bunded area to prevent release to drains and/or watercourses.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Viscous liquid.

Colour

Colourless.

Odour

Almost odourless.

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Odour threshold	Not determined.
pH	pH (diluted solution): About 5-10%
Melting point	Approx. 18°C
Initial boiling point and range	Approx. 290°C @
Flash point	Approx. 160°C
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Scientifically unjustified.
Upper/lower flammability or explosive limits	Upper flammable/explosive limit: 11.3% Lower flammable/explosive limit: 2.6%
Vapour pressure	< 0.1 hPa @ 20 °C
Vapour density	Not determined.
Relative density	Approx. 1.26 g/ml @ 20°C
Bulk density	Not determined.
Solubility(ies)	Miscible with water.
Partition coefficient	log Pow: -1.75
Auto-ignition temperature	Approx. 400°C
Decomposition Temperature	No information available.
Viscosity	1412 mPa s @ 20°C
Explosive properties	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions May generate heat.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid freezing. When exposed to air, this product will absorb moisture.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.6. Hazardous decomposition products

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Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

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

Species Rat

Notes (oral LD₅₀) REACH dossier information.

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 56,750.0

Species Guinea pig

Notes (dermal LD₅₀) REACH dossier information.

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 2.75

Species Rat

Notes (inhalation LC₅₀) REACH dossier information.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met.

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro DNA damage and/or repair: Negative.

Genotoxicity - in vivo Scientifically unjustified.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - 2000 mg/kg/day, Oral, Rat Based on available data the classification criteria are not met.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1310 mg/kg, Oral, Rat No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - single exposure

STOT - single exposure No specific test data are available.

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 8000-10000 mg/kg, Oral, Rat Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

General information

This product has low toxicity.

Inhalation

Vapours/aerosol spray may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.

Ingestion

Nausea, vomiting. May cause stomach pain or vomiting. Diarrhoea.

Skin contact

May cause irritation.

Eye contact

May cause temporary eye irritation. Profuse watering of the eyes. Redness.

Route of entry

Skin and/or eye contact Oral Inhalation

SECTION 12: Ecological Information

Ecotoxicity

The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Acute toxicity - fish

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

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 10000 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants

EC₀, 192 hours: > 10000 mg/l, Freshwater algae

Acute toxicity - microorganisms

NOEC, 16 hours: > 1000 mg/l, Activated sludge
REACH dossier information.

Acute toxicity - terrestrial

Scientifically unjustified.

Chronic toxicity - fish early life stage

Scientifically unjustified.

Short term toxicity - embryo and sac fry stages

Not determined.

Chronic toxicity - aquatic invertebrates

Scientifically unjustified.

Toxicity to soil

Scientifically unjustified.

Toxicity to terrestrial plants

Scientifically unjustified.

12.2. Persistence and degradability

Phototransformation

Not determined.

Stability (hydrolysis)

Scientifically unjustified.

Biodegradation

Water - Degradation (%) 94%: 24 hours
The substance is readily biodegradable.

Biological oxygen demand

No specific test data are available.

Chemical oxygen demand

No specific test data are available.

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12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: -1.75

12.4. Mobility in soil

Mobility The product is miscible with water and may spread in water systems.

Adsorption/desorption coefficient Scientifically unjustified.

Henry's law constant 0.000000006 atm m³/mol @ @ 25°C

Surface tension ~ 63.4 mN/m @ 20°C

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 None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information When handling waste, the safety precautions applying to handling of the product should be considered. The generation of waste should be minimised or avoided wherever possible.

Disposal methods Reuse or recycle products wherever possible. 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

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

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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

National regulations	Health and Safety at Work etc. Act 1974 (as amended). Control of Substances Hazardous to Health Regulations 2002 (as amended).
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.
Guidance	Workplace Exposure Limits EH40.
Authorisations (Title VII Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Title VIII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	ATE: Acute Toxicity Estimate. DNEL: Derived No Effect Level. DMEL: Derived Minimal Effect Level. PNEC: Predicted No Effect Concentration. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. NOAEC: No Observed Adverse 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.
General information	Only trained personnel should use this material. This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons.
Key literature references and sources for data	Source: European Chemicals Agency, http://echa.europa.eu/

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Classification procedures according to Regulation (EC) 1272/2008	Not Classified for Environmental, Not Classified for Health: On basis of test data.
Revision date	12/12/2017
Revision	4
Supersedes date	04/04/2014
SDS number	20980
SDS status	Approved.

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