SAFETY DATA SHEET  
GLYCEROL LRG  

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: HOCH2CH(OH)CH2OH

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

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)

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
GLYCEROL LRG

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
CAS number 56-81-5
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
GLYCEROL LRG

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 (CO2). 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.

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.

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
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.

SECTION 8: Exposure Controls/personal protection
GLYCEROL LRG

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 (Marine water): 0.33 mg/kg
- Soil: 0.141 mg/kg

8.2. Exposure controls

Protective equipment

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

Appropriate engineering controls

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.
GLYCEROL LRG

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
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
GLYCEROL LRG

**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**

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<th>Parameter</th>
<th>Value</th>
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</thead>
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<tr>
<td>Acute toxicity oral (LD₅₀ mg/kg)</td>
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<tr>
<td>Species</td>
<td>Rat</td>
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<td>Notes (oral LD₅₀)</td>
<td>REACH dossier information.</td>
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**Acute toxicity - dermal**

<table>
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<th>Parameter</th>
<th>Value</th>
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</thead>
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<td>Acute toxicity dermal (LD₅₀ mg/kg)</td>
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</tr>
<tr>
<td>Species</td>
<td>Guinea pig</td>
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<td>Notes (dermal LD₅₀)</td>
<td>REACH dossier information.</td>
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**Acute toxicity - inhalation**

<table>
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<th>Parameter</th>
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</thead>
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<tr>
<td>Acute toxicity inhalation (LC₅₀ vapours mg/l)</td>
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<tr>
<td>Species</td>
<td>Rat</td>
</tr>
<tr>
<td>Notes (inhalation LC₅₀)</td>
<td>REACH dossier information.</td>
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</tbody>
</table>

**Skin corrosion/irritation**

Based on available data the classification criteria are not met.

**Animal data**

Not irritating.

**Serious eye damage/irritation**

Based on available data the classification criteria are not met.

**Respiratory sensitisation**

Based on available data the classification criteria are not met.

**Skin sensitisation**

Based on available data the classification criteria are not met.

**Germ cell mutagenicity**

DNA damage and/or repair: Negative.

**Genotoxicity - in vitro**

Scientifically unjustified.

**Genotoxicity - in vivo**

No evidence of reproductive toxicity in animal studies.

**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

**Reproductive toxicity - development**

Developmental toxicity; - NOAEL: 1310 mg/kg, Oral, Rat

**Specific target organ toxicity - single exposure**

STOT - single exposure

No specific test data are available.
GLYCEROL LRG

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  EC₅₀, 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.
GLYCEROL LRG

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
GLYCEROL LRG

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

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.
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
GLYCEROL LRG

Classification procedures according to Regulation (EC) 1272/2008

Not Classified for Environmental, Not Classified for Health: On basis of test data.

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SDS number 20980
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