1. Identification

GHS Product Identifier: GLYCERINE
Company Name: CHEM-SUPPLY PTY LTD (ABN 19 008 264 211)
Address: 38 - 50 Bedford Street GILLMAN SA 5013 Australia
Telephone/Fax Number: Tel: (08) 8440-2000 Fax: (08) 8440-2001

Recommended use of the chemical and restrictions on use:
Alkyd resins, dynamite, ester gums, pharmaceuticals, perfumery, plasticiser for regenerated cellulose, cosmetics, foodstuffs, sweetener, liqueurs, confectionery, conditioning tobacco, liquors, solvent, printer’s ink rolls, polyurethane polyls, manufacture of nitroglycerine (dynamite), elastic glues, emulsifying agent, rubber stamp and copying inks, binder for cements and mixes, special soaps, lubricant and softener, bacteriostat, penetrant, hydraulic fluid, shock absorber fluid, humectant, fermentation nutrients, antifreeze mixtures and laboratory reagent.

Other Names:
Name | Product Code
--- | ---
GLYCERINE LR | GL010
GLYCERINE USP/BP | GP010
GLYCERINE AR | GA010
Glycerol | 
1,2,3-Propanetriol | 
Trihydroxypropane | 
Glycerin | 
Glycol alcohol | 
GLYCERINE Vegetable Grade | GP044

Other Information:
EMERGENCY CONTACT NUMBER: +61 08 8440 2000
Business hours: 8:30am to 5:00pm, Monday to Friday.

Chem-Supply Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Chem-Supply Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Chem-Supply Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

Not classified as dangerous goods according to the Australian Dangerous Goods Code (ADG).

3. Composition/information on ingredients

Chemical Characterization:
Ingredients: Liquid

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
<th>Hazard Symbol</th>
<th>Risk Phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>100 %</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. First-aid measures

**Inhalation**
Remove victim to fresh air. Employ artificial respiration if indicated. Seek medical attention.

**Ingestion**
Rinse mouth thoroughly with water immediately. If swallowed, do NOT induce vomiting. Seek medical advice.

**Skin**
Wash affected areas with copious quantities of water immediately. If irritation occurs seek medical advice.

**Eye contact**
Irrigate with copious quantity of water for 15 minutes. Seek medical assistance if symptoms persist.

**First Aid Facilities**
Maintain eyewash fountain in work area.

**Advice to Doctor**
Consult Poisons Information Centre.
5. Fire-fighting measures

Suitable extinguishing media
No limitations to the type of extinguishing media.

Hazardous Combustion Products
Oxides of carbon.

Specific Methods
- Small fire: Use dry chemical, CO2, water spray or alcohol-resistant foam.
- Large fire: Use water spray, fog or foam.

Specific hazards arising from the chemical
May burn but do not ignite readily. Containers may explode when heated. Runoff may pollute waterways. Fire may produce irritating, poisonous and/or corrosive gases.

Precautions in connection with Fire
- Wear SCBA and structural firefighter's uniform.

6. Accidental release measures

Personal Precautions
- Avoid inhalation, contact with skin, eyes and clothing.

Personal Protection
- Wear protective clothing specified for normal operations (see Section 8)

Clean-up Methods - Small Spillages
- Absorb or contain liquid with sand, earth or spill control material. Shovel up using non sparking tools and place in a labelled, sealable container for subsequent safe disposal. Put leaking containers in a labelled drum or overdrum.

Environmental Precautions
- Prevent further leakage or spillage and prevent from entering drains.

7. Handling and storage

Precautions for Safe Handling
- Avoid skin and eye contact. Avoid generating and inhaling mist. Use in ventilated areas.
- Store in cool place and out of direct sunlight. Store away from sources of heat or ignition. Keep containers closed at all times. Keep in a well-ventilated place.

Conditions for safe storage, including any incompatibilities
- Classified as a C2 (Combustible liquid) for the purpose of storage and handling. Refer Australian Standard AS 1940 - 1993 'The storage and handling of flammable and combustible liquids'.

Storage Regulations

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Occupational exposure limit values</th>
<th>Name</th>
<th>STEL</th>
<th>TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

A time weighted average (TWA) has been established for glycerin mist (Worksafe Aust) of 10 mg/m3.

The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods.

Respiratory Protection
- Where ventilation is not adequate, respiratory protection may be required. Avoid breathing dust, vapours or mists. Respiratory protection should comply with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. Filter capacity and respirator type depends on exposure levels. In event of emergency or planned entry into unknown concentrations a positive pressure, full-facepiece SCBA should be used. If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

Eye Protection
- The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection
- Hand protection should comply with AS 2161, Occupational protective gloves - Selection, use and
Footwear
Safety boots in industrial situations is advisory, foot protection should comply with AS 2210, Occupational protective footwear - Guide to selection, care and use.

Body Protection
Clean clothing or protective clothing should be worn, preferably with and apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hygiene Measures
Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colourless liquid.</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>18 °C</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>290 °C</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble.</td>
</tr>
<tr>
<td>Solubility in Organic Solvents</td>
<td>Soluble in alcohol. Insoluble in ether, benzene, chloroform, carbon tetrachloride, carbon disulfide and in fixed and volatile oils.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.25</td>
</tr>
<tr>
<td>pH</td>
<td>Neutral to litmus.</td>
</tr>
<tr>
<td>Vapour Pressure (Air=1)</td>
<td>0.0025 mm @ 50 °C</td>
</tr>
<tr>
<td>Vapour Density</td>
<td>3.17</td>
</tr>
<tr>
<td>Flash Point</td>
<td>199 °C c.c.</td>
</tr>
<tr>
<td>Flammability</td>
<td>Combustible.</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>392 °C</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>92.09</td>
</tr>
<tr>
<td>Other Information</td>
<td>Sweet warm taste. About 0.6 times as sweet as cane sugar. Absorbs moisture from air, also absorbs H2S, HCN and SO2.</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

Chemical Stability Stable.

Conditions to Avoid
Heat, flames, ignition sources and incompatibles.

Incompatible Materials
Strong oxidizing agents, halogens, ethylene oxide, and nitric acid/sulfuric acid. May react violently with acetic anhydride, nitrobenzene and alkali metal hydrides.

Hazardous Decomposition Products
Oxides of carbon.

Possibility of hazardous reactions
Contact with strong oxidizing agents such as chromium trioxide, potassium chlorate and potassium permanganate may produce an explosion.

11. Toxicological Information

Acute Toxicity - Oral
LD50 (rat): 12600 mg/kg.

Ingestion
May be harmful if swallowed. May cause drowsiness, gastrointestinal pain, cramps, nausea, headaches, dizziness, vomiting and diarrhoea, unconsciousness, and if excessively large amounts are ingested, may experience dehydration, nausea, vomiting, kidneys, coma and death may result.

Inhalation
Irritating to mucous membranes and respiratory tract.

Skin
May be harmful if absorbed through the skin causing irritating.

Eye
May cause irritation to the eyes with symptoms including redness, burning sensation and tearing.

Carcinogenicity
No evidence of carcinogenic properties.

Chronic Effects
Chronic poisoning by ingestion or inhalation may include headache, giddiness, disturbance of vision, smell, taste and sleep, trembling of the limbs, weakness and mental excitement. May be accompanied by loss of appetite, nausea, vomiting and diarrhoea. Prolonged or repeated exposure may cause toxicity to kidneys.
GLYCERINE

Not classified as hazardous

12. Ecological information

**Persistence and degradability**
Biologic degradation: 63%/14d

**Bioaccumulative Potential**
No bioaccumulation is to be expected (log P(o/w <1).

**Acute Toxicity - Fish**
LC50(Carassius auratus): > 5000 mg/l /24 h.

**Acute Toxicity - Daphnia**
EC50 (Daphnia magna): > 10000 mg/l /24 h.

**Acute Toxicity - Algae**
IC5 (Scenedesmus quadricauda): > 10000 mg/l /7d.

**Acute Toxicity - Bacteria**
EC5(Pseudomonas putida): > 10000 mg/l /16 h.

**Acute Toxicity - Other Organisms**
Protozoa: EC5 (Entosiphon sulcatum): 3200 mg/l /72 h.

13. Disposal considerations

Dispose of according to relevant local, state and federal government regulations.

14. Transport information

Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

15. Regulatory information

Listed in the Australian Inventory of Chemical Substances (AICS).

16. Other Information

"Standard for the Uniform Scheduling of Medicines and Poisons No. 3", Commonwealth of Australia, June 2012.


'Labelling of Hazardous Workplace Chemicals, Code of Practice' Safe Work Australia.


Worksafe Australia, 'Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(2004)]'.

Worksafe Australia, 'Hazardous Substances Information System, 2005'.

Worksafe Australia, 'National Code of Practice for the Labelling of Workplace Hazardous Substances (2011)'.


Paul McCarthy Ph. (08) 8440 2000  DISCLAIMER STATEMENT:
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Empirical Formula & Structural Formula
CH2 OH CH OH CH2 OH

User Codes
User Field Title: Cas No.  
User Code: 56-81-5
Product Name: GLYCERINE

Not classified as hazardous

...End Of MSDS...