

**MATERIAL SAFETY DATA SHEET**  
**GLYCEROL B.P.**
**1. Identification of the Product and Company**

<b>Product Name:</b>	<b>GLYCEROL B.P.</b>
<b>Product Code:</b>	GLY00790F
<b>Other Names:</b>	1,2,3-propanetriol; glycerin
<b>Use:</b>	Glycerol is useful as a sweetening agent, demulcent and possesses good solvent properties for many compounds.
<b>Company Name &amp; Contact Details</b>	Drug Information Pharmacist ORION Laboratories Pty Ltd ABN 56 009 293 136 25-29 Delawney Street, Balcatta, Western Australia 6021 AUSTRALIA <b>Telephone (all hours): +618 9441 7800</b> FREE PHONE: 1800 805 546 FREE FAX: 1800 004 110 EMAIL: customerservice@orion.net.au; WEBSITE: www.orion.net.au ORION® is a registered trademark of Orion Laboratories Pty Ltd
<b>Other Information</b>	All reasonable care has been taken to ensure information and advice contained in this data sheet is accurate at time of printing. However, Orion accepts no liability for any loss or damages suffered as a consequence of reliance on the information contained herein.

**2. Hazards Identification**

**Hazard Classification** This product is not hazardous or dangerous

Generally not hazardous under normal conditions of handling, however, good laboratory practices should always be used. Avoid long term exposure to skin or by inhalation.

**3. Composition/Information on Ingredients**

<b>Chemical Entity</b>	<b>CAS No:</b>	<b>Proportion</b>
Glycerol (Glycerin)	56-81-5	90 - 100%

**4. First Aid Measures**

<b>Inhalation:</b>	Remove to fresh air. Seek medical attention for any breathing difficulty.
<b>Ingestion:</b>	Administer water to dilute the glycerol. Seek medical attention if a large is swallowed (more than 50mL).
<b>Skin:</b>	Wash with soap and plenty of water. Launder clothing and shoes before reuse. Seek medical attention if irritation develops.
<b>Eye:</b>	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower lids occasionally. Seek medical attention if irritation persists.
<b>Chronic Exposure:</b>	May cause kidney injury.
<b>Advice to Doctor:</b>	Treat symptomatically.

### 5. Fire Fighting Measures

<b>Extinguishing Media</b>	Use any means suitable for extinguishing surrounding fire. Water spray may be used to extinguish surrounding fire and cool exposed containers. Water spray will also reduce fume and irritant gases. Small fire: Dry chemical powder. Large fire: water spray, fog or foam.
<b>Hazards from Combustion products</b>	Carbon oxides (CO, CO <sub>2</sub> ), toxic gases and vapours may be released in a fire.
<b>Precautions &amp; Equipment for Fire Fighters</b>	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.
<b>Hazchem Code</b>	None allocated

### 6. Accidental Release Measure

Ventilate area of leak or spill. Wear appropriate personal protective equipment (avoid inhaling mist or skin & eye contact). Contain and recover liquid when possible. Contain using an absorbent (sand, vermiculite) where appropriate. Collect and seal in properly labelled containers for disposal. Wash area down with excess water.

### 7. Handling and Storage

<b>Safe Handling Practices</b>	Keep containers tightly closed as glycerol is hygroscopic (absorbs water). Protect against physical damage. Isolate from incompatible substances.
<b>Storage</b>	Store below 30°C
<b>Other Information</b>	Keep away from oxidizing agents.

### 8. Exposure Controls; Personal Protection

<b>Exposure Limits:</b>	TWA 10 mg/m <sup>3</sup>
	TWA The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
<b>Engineering Controls</b>	Mechanical ventilation advised at elevated temperatures.
<b>Personal Protection</b>	If spillage or splashing is likely to occur, wear safety goggles or face shield. When handling heated solution, wear (thermal) protective clothing and gloves.

### 9. Physical and Chemical Properties

<b>Appearance / Odour:</b>	A clear, colourless, hygroscopic, syrupy, (almost) odourless liquid with a sweet taste.		
<b>pH:</b>	Neutral to litmus	<b>Boiling Point:</b>	290°C
<b>Vapour Pressure:</b>	< 1 mm of Hg @ 25°C	<b>Freezing/Melting Point:</b>	19°C
<b>Vapour Density:</b>	3.17 (Air = 1)	<b>Solubility:</b>	Miscible in water @ 20°C
<b>Specific Gravity:</b>	1.2636. @ 20°C		

### 10. Chemical Stability and Reactivity Information

<b>Conditions Contributing to Instability</b>	Stable under normal conditions of use and storage. <b>Fire:</b> Flash point: 199°C CC; Auto-ignition temperature: 370°C Slight fire hazard when exposed to heat or flame. <b>Explosion:</b> Above flash point, vapour-air mixtures may cause flash fire. Explosive glyceryl trinitrate is formed from a mixture of glycerine and nitric and sulphuric acids.
<b>Incompatibilities</b>	Strong oxidizers. Can react violently with acetic anhydride, calcium oxychloride, chromium oxides and alkali metal hydrides.

**11. Toxicological Information**

<b>Inhalation:</b>	Due to the low vapour pressure, inhalation of the vapours at room temperatures is unlikely. Inhalation of mist may cause irritation of respiratory tract.
<b>Ingestion:</b>	Low toxicity. May cause thirst (dehydration), nausea, vomiting, headache, and diarrhoea. May cause elevated sugar levels.
<b>Skin:</b>	May cause irritation.
<b>Eye:</b>	May cause irritation.
<b>Chronic Exposure:</b>	May cause kidney injury.
<b>Aggravation of Pre-existing Conditions:</b>	Persons with pre-existing skin disorders or eye problems or impaired liver or kidney function may be more susceptible to the effects of the substance.
<b>Estimated Toxicity in Animals:</b>	Acute oral toxicity (LD50): 4090 mg/kg [Mouse]. Acute dermal toxicity (LD50): 10000 mg/kg [Rabbit]. Acute toxicity of mist (LC50): >570 mg/m <sup>3</sup> 1 hours [Rat].

**12. Ecological Information**

<b>Products of Biodegradation:</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation:</b>	The products of degradation are less toxic than the product itself.
<b>Ecotoxicity:</b>	Ecotoxicity in water (LC50): 58.5 ppm 96 hours [Trout].

**13. Disposal Considerations**

<b>Disposal Methods &amp; Containers:</b>	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.
<b>Special Disposal for Landfill or Incineration:</b>	Waste material may be incinerated under controlled conditions where permitted. Refer to local Waste Management Authority Regulations for other approved methods.

**14. Transport Information** Not regulated

<b>Hazchem Code:</b>	None allocated
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**15. Regulatory Information** Not classified

**16. Other Information**

<b>References:</b>	MSDS Glycerol, 11/01/2010 ScienceLab.com.
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Checked by: Anna McLean	Date: September 2011
Approved by: Robert Kimpton	Date: September 2011

Date	Document	Superseded Document	Revision Information
September 2005	GLY00790_3 September 2005	GLY00790_2 November 2001	General review
September 2008	GLY00790_04 September 2008	GLY00790_3 September 2005	General review
September 2011	GLY00790_05 September 2011	GLY00790_04 September 2008	General review

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