

**FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS**

Issue: December 20

**PRODUCT:** Propylene Glycol USP

**Other Names:** 1,2-propanediol, monopropylene glycol

**Uses:** Food and pharmaceutical applications

**Signal Word:** None

<b>UN No.</b>	N/R
<b>Dangerous Goods Class</b>	N/R
<b>Subsidiary Risk</b>	None
<b>Pack Group</b>	N/R
<b>Hazchem</b>	N/R
<b>Poison Schedule</b>	None

<b>Hazardous Nature:</b>	This product is not classified as hazardous under GHS for Australia criteria
<b>Hazardous Classification:</b>	No GHS Hazard Classification applies
<b>Hazardous Statement:</b>	Not hazardous: intentionally left blank
<b>Exposure Standards:</b>	TWA: AIHA: 10 mg/m <sup>3</sup> : STEL: Not specified

**Physical Characteristics (Typical)**

Section 9 of SDS

Appearance	Clear, colourless oily liquid
Boiling Point/ Range (°C):	188
Flash Point (°C):	99
Specific Gravity/ Density (g/ml @ 15°C):	1.0361
Chemical Stability:	Stable at room temperature and pressure

**Product Ingredients**

Section 3 of SDS

Propylene Glycol	57-55-6	100%
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For further ingredients information, please refer to the full SDS.

**GHS Pictograms**

Section 2 of SDS

No pictogram: not hazardous

For further Risk and Safety information, please refer to the full SDS.

**DEFINITIONS**

Dangerous Goods	Products that are classified as Dangerous for Storage and Transport: these products are allocated a UN No., with accompanying Class, Pack Group, and Sub. Risk, if required. Products that do not have a specific description under the code, but have low flash points, or such, must be classified under their most significant risk, eg. Flammable Goods N.O.S. (Not otherwise specified), UN 1993
Poisonous Substance	Products that are classified under the poisons schedule are a poisonous substance. The proportion of the poison in the product will determine its numerical classification.
Hazardous Substance	Products are considered to be Hazardous if they pose an intrinsic risk to human or environmental health, such as mutagens (able to change DNA), teratogens (able to result in birth defects), carcinogens (able to generate cell abnormalities), etc. Materials are not hazardous substances if they pose risks such as potential for misuse, like flammability, or explosions when heated and ignited.

**1. IDENTIFICATION**

<b>Product Name:</b>	<b>Propylene Glycol USP</b>
<b>Other Names:</b>	1,2-propanediol, monopropylene glycol
<b>Chemical Family:</b>	Glycol
<b>Recommended Use:</b>	Food and pharmaceutical applications
<b>Supplier:</b>	Sydney Solvents Pty Ltd
<b>ABN:</b>	51 104 642 695
<b>Street Address:</b>	Unit 3, 10 Production Place, Jamisontown NSW 2750
<b>Telephone:</b>	02 4722 5060
<b>Fax:</b>	
<b>Emergency phone:</b>	<b>CHEMCALL: 1800 605 040</b>
<b>All other inquiries:</b>	02 4722 5060

**2. HAZARDS IDENTIFICATION****Hazardous Nature**

This product is not classified as hazardous under GHS for Australia criteria

**Hazardous Classification**

No GHS Hazard Classification applies

**GHS Pictograms**

No pictogram: not hazardous

**Dangerous Goods Classification N/R****Poisons Schedule None****Signal Word None****3. COMPOSITION: Information on Ingredients**

<b>Chemical Ingredient</b>	<b>CAS No.</b>	<b>Proportion (%v/v)</b>
Propylene Glycol	57-55-6	100

**4. FIRST AID MEASURES**

For advice, contact Poisons Information Centre (Phone Australia: 13 1126) or a doctor.

**Ingestion**

If swallowed, DO NOT induce vomiting. Keep at rest. Seek immediate medical attention.

**Eye Contact**

Flush eyes with large amounts of water until irritation subsides. Seek immediate medical attention.

**Skin Contact**

Flush area with large amounts of water and wash area with soap if available. Remove contaminated clothing, including shoes, and launder before reuse. Seek medical attention for skin irritations.

**Inhalation**

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Seek immediate medical attention.

**First Aid facilities**

Provide eye baths and safety showers.

**Medical Attention**

Treat according to symptoms. Avoid gastric lavage: risk of aspiration of product to the lungs with the potential to cause chemical pneumonitis.

## 5. FIRE FIGHTING MEASURES

Shut off product that may 'fuel' a fire if safe to do so. Allow trained personnel to attend a fire in progress, providing firefighters with this Safety Data Sheet. Prevent extinguishing media from escaping to drains and waterways.

### Suitable extinguishing media

Dry chemical, foam, water or carbon dioxide

### Hazards from combustion products

Carbon monoxide and carbon dioxide

### Precautions for fire fighters and special protective equipment

Full protective clothing and self-contained breathing apparatus

**Hazchem Code:** N/R

## 6. ACCIDENTAL RELEASE MEASURES

### Emergency Procedures

Prevent fluid from escaping to drains and waterways. Contain leaking packaging in a containment drum. Prevent vapours from building up in confined areas. Ensure that drain valves are closed at all times. Clean up and report spills immediately.

### Methods and materials for containment

#### **Major Land Spill**

- Eliminate sources of ignition.
- Warn occupants of downwind areas of possible fire and explosion hazard.
- Prevent liquid from entering sewers, watercourses, or low-lying areas.
- Keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Advise authorities if substance has entered a watercourse or sewer or has contaminated soil or vegetation.
- Take measures to minimise the effect on the ground water.
- Contain the spilled liquid with sand or earth.
- Recover by pumping – use explosion proof pump or hand pump – or with a suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity"

#### **Major Water Spill**

- Eliminate any sources of ignition.
- Warn occupants and shipping in downwind areas of possible fire and explosion hazard.
- Notify the port or relevant authority and keep the public away from the area.
- Shut off the source of the spill if possible and safe to do so.
- Confine the spill if possible.
- Remove the product from the surface by skimming or with suitable absorbent material.
- Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.
- See "First Aid Measures" and "Stability and Reactivity".

## 7. HANDLING AND STORAGE

### Precautions for safe handling

This product is combustible. Do not open near open flame, sources of heat or ignition. No smoking. Keep container closed. This product will absorb water from the atmosphere. Observe good industrial hygiene practices when handling this material.

### Conditions for safe storage

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatible substances. Protect container from physical damage.

**Incompatible materials**

Strong oxidising agents

**8. EXPOSURE CONTROLS: PERSONAL PROTECTION****National Exposure Standards**

The time weighted average concentration (TWA) for this product is: AIHA: 10 mg/m<sup>3</sup>, which means the highest allowable exposure concentration in an eight-hour day for a five-day working week. The short-term exposure limit (STEL) is: Not specified, which is the maximum allowable exposure concentration at any time. Products may be identified as skin sensitisers, indicated as (Sen), which means that the product will induce ever-increasing adverse effects with subsequent exposure, such as loss of feeling in extremities, or pain or irritation on contact with the product. Where (Sk) appears, the product will be easily absorbed to the skin, risking overexposure and symptoms similar to Ingestion or Inhalation. applies in this case. Refer: Section 11: Toxicological Effects.

**Biological limit values**

No data available

**Engineering Controls: Ventilation**

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a fume hood. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

**Personal Protective Equipment**

**Respiratory Protection:** Where concentrations in air may exceed the limits described in the National Exposure Standards, it is recommended to use a half-face filter mask to protect from overexposure by inhalation. A type "A" filter material is considered suitable for this product.

**Eye Protection:** Always use safety glasses or a face shield when handling this product.

**Skin/ Body Protection:** Always wear long sleeves and long trousers or coveralls, and enclosed footwear or safety boots when handling this product. It is recommended that chemical resistant gloves (e.g. PVC) be worn when handling this product.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Property	Unit of measurement	Typical value
Appearance	-	Clear, colourless oily liquid
Boiling Point/ Range	°C	188
Flash Point	°C	99
Density @ 15°C	g/ml	1.0361
Vapour Pressure @ 25°C	mm Hg	0.129
Explosive Limits (LEL – UEL)	%	2.6 – 12.5
Vapour Density @ 20°C (Air = 1)	-	2.6
Autoignition Temperature	°C	371
Viscosity @ 20°C	cSt	46
Percent Volatiles	%	Not available
Solubility with Water	% w/w	Miscible

The values listed are indicative of this product's physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

**10. STABILITY AND REACTIVITY****Chemical Stability**

Stable at room temperature and pressure

**Conditions to avoid**

Sources of heat and ignition, open flames.

**Hazardous decomposition products**

Carbon monoxide and carbon dioxide may be formed when heated to decomposition. Aldehydes or lactic, pyruvic or acetic acids may also be formed.

**Hazardous reactions**

Strong acids, alkalis, oxidisers and heat

**Hazardous Polymerisation**

Will not occur

**11. TOXICOLOGICAL INFORMATION****Acute Effects*****Ingestion***

This product is largely non-toxic, but has the potential to result in euphoria, nausea, headaches, and dizziness in large doses, such as intentionally ingesting the product, over prolonged periods. If swallowed in large quantities, it may cause harmful central nervous system effects. Aspiration to the lungs may cause chemical pneumonitis.

***Eye Contact***

This product will have little or no effect on the eye tissue. There may be slight irritation likened to water contact.

***Skin Contact***

This product is not harmful to the skin, but over extended periods of time in large doses, may have a defatting action on the skin.

***Inhalation***

This product has no vapour effects at ambient temperatures and is virtually odourless at elevated temperatures. Inhalation of mists of this product may result in chemical pneumonitis.

**Chronic Effects**

There are no long term health effects expected with this product.

**Other Health Effects Information**

Individuals with pre-existing skin or respiratory conditions may be sensitive to this product with repeated or prolonged contact.

**Toxicological Information**

LD<sub>50</sub> (oral, rat) 20 g/kg, LD<sub>50</sub> (dermal, rabbit): 20.8 g/kg

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):	LC <sub>50</sub> (96hr): Rainbow Trout: 44 ml/L
Daphnia Magna EC <sub>50</sub> (24 hr):	> 10,000 mg/L
Blue-green algae (Toxicity threshold 7-8 days):	Fresh water algae EC <sub>50</sub> : 24,200 mg/L
Green algae (Toxicity threshold 7-8 days):	Marine algae: EC <sub>50</sub> : 19,300 mg/L

**Persistence/ degradability**

This material is expected to be readily biodegradable in soil and in water. When released into the air, it is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. (Half life: 1-10 days)

**Mobility**

This product is highly mobile in water and soil, due to it's water miscibility. It is likely that this product will contaminate groundwater rapidly if accidentally released to the environment.

**13. DISPOSAL CONSIDERATIONS****Disposal Methods**

Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor. Care should be taken to ensure compliance with national and local authorities. Packaging may still contain fumes and vapours that are flammable and harmful. Ensure that empty packaging is allowed to dry.

**Special Precautions for Landfill or Incineration**

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as chemical waste in accordance with the local authority.

**14. TRANSPORT INFORMATION**

Road and Rail Transport		Marine Transport		Air Transport	
UN No.	N/R	UN No.	N/R	UN No.	N/R
Proper Shipping Name	Propylene Glycol	Proper Shipping Name	Propylene Glycol	Proper Shipping Name	Propylene Glycol
DG Class	N/R	DG Class	N/R	DG Class	N/R
Sub. Risk	None	Sub. Risk	None	Sub. Risk	None
Pack Group	N/R	Pack Group	N/R	Pack Group	N/R
Hazchem	N/R	Hazchem	N/R	Hazchem	N/R

**Dangerous Goods Segregation**

This product is classed as Dangerous Goods Class N/R, packing group N/R. Please consult the Australian Dangerous Goods Code for Transport by Road and Rail for information.

**15. REGULATORY INFORMATION**

**Country/ Region:** Australia

**Inventory:** AICS

**Status:** Listed

**Poisons Schedule:** None

**16. OTHER INFORMATION**

**Reasons for Issue:** 5 year review and update

**Abbreviations:**

AICS: Australian Inventory of Chemical Substances

CAS Number: Chemical Abstracts Number

IARC: International Agency for Research on Cancer

NOHSC: National Occupational Health and Safety Council

**References:**

- Supplier Safety Data Sheets
- <http://chem.sis.nlm.nih.gov/chemidplus> (December 20)
- <https://www.nicnas.gov.au/> (December 20)
- OECD eChemPortal Substance Search  
<https://www.echemportal.org/echemportal/participant/page.action?pageID=9>

The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority. Please consult the relevant legislation and regulations governing the use and storage of this type of product. For further information, please contact Australasian Solvents and Chemicals Company Pty. Ltd.

