

SAFETY DATA SHEET

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Propylene Glycol

Other Identifier: USP grade. Heat Transfer Fluid

Recommended Use: Various

Supplier: Big Bubble
ABN: 51 290 656 636

Street Address: 18 Elliott Street
Midvale
Western Australia

Telephone Number: +61 08 9274 1992

Poisons Information Centre: 131 126 Australia

2. HAZARDS IDENTIFICATION

Road and Rail; Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Globally Harmonised System

Hazard Classification

Non Hazardous chemical according to classification by Safe Work Australia
NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

General Precautionary statement:

P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 Read label before use

Poisons Schedule: Not Scheduled

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion
Propylene Glycol	57-55-6	95-100%

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

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Ingestion:	If swallowed, do NOT induce vomiting. Have conscious person drink several glasses of water or milk. Seek medical advice as a precaution
Eye Contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists, seek medical attention
Skin Contact:	If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If irritation persists, seek medical attention
Inhalation:	Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment
Medical attention and special treatment:	Treat Symptomatically

5. FIRE FIGHTING MEASURES

General	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Combustible liquid; May burn but does not ignite readily.
Suitable Extinguishing Media:	Use dry chemical, Carbon dioxide (CO ₂), foam or water spray for extinction - Do not use water jets.
Fire and Explosion Hazards	Containers may explode when heated. When heated, vapours may form explosive mixtures with air.
Hazardous combustion products:	Fire may produce irritating, toxic and/or corrosive gases, including Carbon oxides.
Precautions for fire fighters and special protective equipment:	Contain runoff from fire control or dilution water - Runoff may pollute waterways. Wear self-contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Ensure adequate ventilation. ELIMINATE all ignition sources. Do not touch or walk through spilled material. Avoid breathing vapours and contact with eyes, skin and clothing.
Protective equipment:	Use personal protective equipment as required (see SECTION 8)
Emergency procedures:	Spill or leak area should be isolated immediately. Keep unauthorised personnel away.
Environmental Precautions:	Prevent entry into drains and waterways.

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Methods and materials for Containment and clean up: Stop leak if safe to do so – Prevent entry into waterways, drains or confined areas. Absorb with earth, sand or other non-combustible material and transfer to a suitable container for disposal (see SECTION 13). Wash area down with excess water.

7. HANDLING AND STORAGE

This material must be stored, maintained and used in accordance with the relevant regulations.

Conditions for safe storage: Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Avoid exposure to air. Protect from moisture. Keep away from heat and sources of ignition - No smoking. Keep away from incompatible materials (see SECTION 10). Keep in original Container.

Precautions for safe handling: Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing mist/vapours and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Combustible liquid: Keep away from heat and sources of ignition - No smoking. Do not pressurise containers to empty.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures: For Propane-1,2-diol (CAS No. 57-55-6):
- Safe Work Australia Exposure Standard (vapour & particulates): TWA = 150 ppm (474 mg/m³).
- Safe Work Australia Exposure Standard (particulates only): TWA = 10 mg/m³.
- New Zealand Workplace Exposure Standard (vapour & particulates): TWA = 150 ppm (474 mg/m³).
- New Zealand Workplace Exposure Standard (particulates only): TWA = 10 mg/m³.

Biological Monitoring No Information Available

Engineering Controls Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Personal Protective Equipment

Eye and Face Wear safety goggles.

Skin Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes.

Respiratory If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators

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should comply with AS1716 or an equivalent approved by a state/territory authority.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Viscous Liquid
Colour:	Clear
Auto Ignition temperature:	>421 °C
Decomposition Temperature:	No Data Available
Evaporation Rate:	No Data Available
Flammability:	Combustible
Flash Point:	99 °C [PMCC]
Initial Boiling Point:	187 °C
Melting/Freezing Point:	Super cools, pour point < -57 °C
Freezing Point	No Data Available
Odour:	No Data Available
Odour Threshold:	No Data Available
Partition coefficient: n-octanol/water	No Data Available
pH:	7.5-8.5 (1% in water)
Relative Density:	1.036
Solubility:	Soluble in water, methanol, diethyl ether
Specific Gravity:	1.03
Upper Flammability Limit	No Data Available
Lower Flammability Limit:	No Data Available
Explosive limits:	No Data Available
Vapour density:	> 1
Vapour pressure;	0.06 20 Pa (@ 25 °C)
Viscosity:	No Data Available
Biopersistence:	No Data Available
Crystallinity:	No Data Available
Dustiness:	No Data Available

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Particle size:	No Data Available
Redox potential:	No Data Available
Release of invisible flammable vapours and gases	Fire/decomposition may produce irritating, toxic and/or corrosive gases, including Carbon oxides. When heated, vapours may form explosive mixtures with air
Saturated Vapour Concentration	No Data Available
Other:	Hygroscopic.

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	None
Incompatible materials:	Strong oxidising agents.
Hazardous decomposition products:	None
Hazardous reactions or Polymerisation:	None

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Eye contact:	May cause minor eye irritation
Skin contact:	Contact with skin may result in irritation. Has a degreasing effect on the skin
Inhalation:	Not expected to be a sensitiser
Acute Toxicity:	Low toxicity in animals - LD50 Oral (rat) > 20,000mg/kg
Specific Target Organ Toxicity (STOT) – single exposure:	May cause irritation to the lungs and respiratory system
Specific Target Organ Toxicity (STOT) – repeated exposure:	Repeated excessive ingestion may cause central nervous system effects

12. ECOLOGICAL INFORMATION

Ecotoxicity	Acute toxicity:	
	Fish –	Low toxicity: LC/EC/IC50 > 100mg/l
	Aquatic invertebrate	Low toxicity: LC/EC/IC50 > 100mg/l
	-	
	Algae –	Low toxicity: LC/EC/IC50 > 100mg/l
	Microorganisms –	Expected to have low toxicity: LC/EC/IC50 > 100mg/l
	Chronic toxicity:	

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Fish –	Data not available
Aquatic invertebrate	Data not available
Algae –	Data not available
Microorganisms –	Data not available

Persistence and degradability	Biodegradable.
Bioaccumulative potential	Data not available.
Mobility	Miscible in water.

13. DISPOSAL CONSIDERATIONS

Disposal methods: Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility. Or refilled at Big Bubble in Midvale.

14. TRANSPORT INFORMATION

Road and Rail Transport Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule:

Not scheduled

Australian Inventory of Chemical Substances (AICS):

Listed

Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76):

Not applicable

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16. OTHER INFORMATION

Revision date: 30/10/2021

Reason for issue: Update SDS

Key/Legend:

< Less Than

> Greater Than

AICS Australian Inventory of Chemical Substances

atm Atmosphere

CAS Chemical Abstracts Service (Registry Number)

cm² Square Centimetres

CO₂ Carbon Dioxide

COD Chemical Oxygen Demand

deg C (°C) Degrees Celcius

g Grams

g/cm³ Grams per Cubic Centimetre

g/l Grams per Litre

HSNO Hazardous Substance and New Organism

IDLH Immediately Dangerous to Life and Health

immiscible Liquids are insoluble in each other.

inHg Inch of Mercury

inH₂O Inch of Water

K Kelvin

kg Kilogram

kg/m³ Kilograms per Cubic Metre

LC₅₀ LC stands for lethal concentration. LC₅₀ is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.

LD₅₀ LD stands for Lethal Dose. LD₅₀ is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.

ltr or L Litre

m³ Cubic Metre

mbar Millibar

mg Milligram

mg/24H Milligrams per 24 Hours

mg/kg Milligrams per Kilogram

mg/m³ Milligrams per Cubic Metre

Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.

mm Millimetre

mmH₂O Millimetres of Water

mPa.s Millipascals per Second

N/A Not Applicable

NIOSH National Institute for Occupational Safety and Health

NOHSC National Occupational Health and Safety Commission

OECD Organisation for Economic Co-operation and Development

PEL Permissible Exposure Limit

Pa Pascal

ppb Parts per Billion

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ppm Parts per Million^{[1][1]}_{SEP}
ppm/2h Parts per Million per 2 Hours^{[1][1]}_{SEP}
ppm/6h Parts per Million per 6 Hours^{[1][1]}_{SEP}
psi Pounds per Square Inch^{[1][1]}_{SEP}
R Ranking^{[1][1]}_{SEP}
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value^{[1][1]}_{SEP} the Tonne^{[1][1]}_{SEP}
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours
UN United Nations
wt Weight

This material safety data sheet has been prepared by Midland Chemicals

This MSDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. No liability is accepted whether direct or indirect from its application since the conditions of final use are outside Midland Chemicals control. The end user is obliged to conform to relevant government regulations and/or patent laws applicable in their respective States of Countries.