

FOR FURTHER INFORMATION, PLEASE REFER TO THE SDS

Issue: December 15

PRODUCT: Propylene Glycol TG
Product code: 714
Other Names: 1,2-propanediol, monopropylene glycol
Uses: Industrial solvent: paint and ink manufacture, agricultural chemicals

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

Hazardous Nature:	This product is not classified as hazardous under GHS for Australia criteria
Hazardous Classification:	No GHS Hazard Classification applies
Hazardous Statement:	
Exposure Standards:	TWA: 474 mg/m ³ (150 ppm): STEL: Not specified: consider 900 ppm

Physical Characteristics (Typical)		Section 9 of SDS
Appearance	Clear, colourless liquid	
Boiling Point/ Range (°C):	188	
Flash Point (°C):	103	
Specific Gravity/ Density (g/ml @ 15°C):	1.04	
Chemical Stability:	Stable at room temperature and pressure	

Product Ingredients		Section 3 of SDS
Propylene Glycol	57-55-6	100

For further ingredients information, please refer to the full SDS.

GHS Pictograms	Section 2 of SDS
Not hazardous: intentionally left blank	

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.

SUMMARY INFORMATION ONLY

1. IDENTIFICATION

Product Name: Propylene Glycol TG
Product Code: 714
Other Names: 1,2-propanediol, monopropylene glycol
Chemical Family: Glycol
Recommended Use: Industrial solvent: paint and ink manufacture, agricultural chemicals
Supplier: Clean Plus Chemicals Pty Ltd
ABN: 68 055 363 187
Street Address: 16 George Young Street, Auburn NSW 2144
Telephone: 02 9738 7444
Emergency phone: 1800 201 700

2. HAZARDS IDENTIFICATION

Hazardous Nature

THIS MATERIAL IS NOT HAZARDOUS ACCORDING TO THE HEALTH CRITERIA OF SAFE WORK AUSTRALIA.

Hazardous Classification

No GHS Hazard Classification applies

Hazardous Statement

GHS Pictograms

Not hazardous: intentionally left blank

Hazard Statements

Not hazardous: intentionally left blank

Precautionary Statements

Not hazardous: intentionally left blank

Dangerous Goods Classification N/R

Poisons Schedule None

3. COMPOSITION: Information on Ingredients

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

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.

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

Water fog, fine water spray or foam. Do not use water jets

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

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".

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.

Conditions for safe storage

Store in a cool, dry place away from direct sunlight. Do not pressurise, cut, heat or weld containers - residual vapours are combustible. This product will fuel a fire in progress. Store in accordance with AS1940 for combustible liquids.

Incompatible materials

None specified

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

The time weighted average concentration (TWA) for this product is: 474 mg/m³ (150 ppm), 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: consider 900 ppm, which is the maximum allowable exposure concentration at any time.

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 liquid
Boiling Point/ Range	°C	188
Flash Point	°C	103
Density @ 15°C	g/ml	1.04
Vapour Pressure @ 20°C	kPa	0.08 mmHg
Explosive Limits (LEL – UEL)	%	2.0 – 17.0
Vapour Density @ 20°C	kPa	2.0
Autoignition Temperature	°C	371
Viscosity @ 20°C	cSt	46
Percent Volatiles	%	100
Solubility with Water	% w/w	100

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

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, carbon dioxide and other organic complexes on incomplete burning or oxidation.

Hazardous reactions

Strong acids, alkalis, oxidisers and heat

Hazardous Polymerisation

Will not occur

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

If swallowed in large quantities, it will cause harmful central nervous system effects. Aspiration to the lungs may cause chemical pneumonitis. 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.

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 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

Oral LD₅₀: Rat: 22g/kg

Dermal TC_{Lo}: Skin (rabbit): 20800 mg/kg

ECOLOGICAL INFORMATION**Ecotoxicity****Aquatic Toxicity**

Fish Toxicity (rainbow trout, goldfish, bluegill):

LC₅₀(96hr): Rainbow Trout: 44 ml/L

Daphnia Magna EC₅₀ (24 hr):

> 10 000 000µg/L

Blue-green algae (Toxicity threshold 7-8 days):

Fresh water algae EC₅₀: 24200 mg/L

Green algae (Toxicity threshold 7-8 days):

Marine algae: EC₅₀: 19300 mg/L

Persistence/ degradability

This product is readily biodegradable in aerobic conditions.

Mobility

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

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 is ashless and can be burned directly in appropriate equipment.

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.

REGULATORY INFORMATION

Country/ Region: Australia

Inventory: AICS

Status: Listed

Poisons Schedule: None

OTHER INFORMATION

Reasons for Issue: Upgrade to GHS SDS; Amalgamated supplier changes in all sections

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 15)
- <http://hsis.ascc.gov.au/SearchHS.aspx> (December 15)
- Ecotoxicology data: http://cfpub.epa.gov/ecotox/quick_query.htm (December 15)
- *Sax's Dangerous Properties of Industrial Materials*, Richard J. Lewis Snr., pub. Canada (2000)

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals directly. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.