



SAFETY DATA SHEET

Product Name: GLY-PRO™ MG HTF

HAZARDOUS CHEMICAL, NON-DANGEROUS GOODS

Glycol Sales Australia (GSA) encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name:	GLY-PRO™ MG HTF
Company identification:	Glycol Sales Australia PO BOX 136 LILYDALE, VIC 3140
Contact Details:	1300 459 265 info@glycolsales.com.au
Emergency Telephone Number:	For advice, contact a doctor (at once) or the Australian Poisons Information Centre: 131 126 Transport Emergency Only Dial 000

Recommended use of the chemical and restrictions on use Identified uses:

GLY-PRO™ MG HTF is a heat transfer fluid contains greater than 95% w/w of ethylene glycol with special designed industrial corrosion inhibitor package. The fluid is clear, however can be dyed as required.

Quality potable water is recommended, however deionized water is always preferred for dilution. GLY-PRO™ MG HTF should be used min 25% - to max 60% w/w concentration.

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Typical concentrations of GLY-PRO™ MG Heat Transfer Fluid.

Freeze point °C	GLY-PRO™ MG HTF Freeze Protection % v/v	GLY-PRO™ MG HTF Burst Protection % v/v
-7	17	11.5
-12	27	18
-18	35	23
-23	40	27.5
-29	47	32
-34	51	31.5
-40	55	31.5
-46	58	31.5
-50	63	31.5

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of Safe Work Australia.

**Signal Word**

Warning

Hazard Classifications

Acute Toxicity - Oral - Category 4

Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Hazard Statements

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure.

Prevention Precautionary Statements

P102 Keep out of reach of children.

P103 Read label before use.

P260 Do not breathe fume, gas, mist, vapours or spray.

P264 Wash hands, face and all exposed skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Product Name: GLY-PRO™ MG HTF**Response Precautionary Statements**

P101 If medical advice is needed, have product container or label at hand.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P314 Get medical advice/attention if you feel unwell.
 P33 Rinse mouth

Storage Precautionary Statement

Not allocated

Disposal Precautionary Statement

Dispose of contents/container in accordance with local, regional, national and international regulations.

Poison Schedule: S6. Poison

DANGEROUS GOOD CLASSIFICATION

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Ethylene glycol ingredients determined to be non-hazardous	107-21-1	~95.5 % (w/w) Balance

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove contaminated clothing and loosen remaining clothing if required. Breathe fresh air. If symptoms persist seek medical advice.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye contact: If in eyes wash out immediately with water. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Immediately call Poisons Centre or Doctor.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), alcohol resistant foam, standard foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material.

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Firefighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited.

6. ACCIDENTAL RELEASE MEASURES**SMALL SPILLS**

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapour. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

LARGE SPILLS

Slippery when spilt. Clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

Dangerous Goods – Initial Emergency Response Guide No: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid eye contact and skin contact. Avoid inhalation of vapour.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Always keep container standing upright. Keep containers closed when not in use - check regularly for leaks.

This material is a Scheduled Poison Schedule 6 (Poison) and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:	ppm	TWA mg/m3	ppm	STEL mg/m3	NOTICES
Ethylene glycol (particulate)		10	-	-	Sk
Ethylene glycol (vapour)	20	52	40	104	Sk

As published by Safe Work Australia.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

STEL (Short Term Exposure Limit) - the average airborne concentration over a 15-minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' Notice - absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

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If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Vapour heavier than air - prevent concentration in hollows or sumps. Do NOT enter confined spaces where vapour may have collected.

Personal Protection Equipment:**Special Notes:**

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

The selection of PPE is dependent on a full risk assessment. The risk assessment should consider the work situation, physical form of chemical, handling volume and methods, environmental factors/application area.

If the outcome of risk assessment is considerably low, still manufacturer recommends to use minimum PPE stipulated by the chemical industry practices. Ex: Safety Glasses, Safety shoes, Impervious Gloves and suitable protective clothing such as long sleeve clothes with buttoned at neck and wrist.

PROTECTIVE CLOTHES, GLOVES, SAFETY SHOES, SAFETY GLASSES



If inhalation or spill risk exists, also if engineering controls are not effective in controlling any airborne contaminants, wear suitable mist respirator meeting the requirements of AS/NZS 1716; Wear suitable protective clothing covers unprotected exposed skin area with an Overall. If the handling volume is large, chemical resistant Apron, Face shield and suitable respirator must be worn at all times to avoid any injuries.

Available information suggests that gloves made from butyl rubber, natural rubber, nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and skin contact. Avoid inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Base Units:	Litres
Form:	Clear Liquid
Colour:	Red
Odour:	Virtually odourless
Specific Gravity (20 °C):	1.09 – 1.13
Vapour Pressure (20 °C):	0.06 mm Hg at 20°C

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Flash Point (°C):	Not Applicable	Auto ignition Temperature (°C):	No data
Flammability Limits (%):	No data available		
Boiling Point/Range (°C):	158		
pH:	Not applicable		

(Typical values only - consult specification sheet) N Av = Not available, N App = Not applicable

10. STABILITY AND REACTIVITY

Chemical stability: This material is thermally stable when stored and used as directed.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

Hazardous reactions: No known hazardous reactions.

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:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract.

Skin contact: Contact with skin may result in irritation.

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: May be an eye irritant.

Acute toxicity

Inhalation: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >20 mg/L

Skin contact: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >2,000 mg/Kg

Ingestion: This material has been classified as a Category 4 Hazard. Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

Corrosion/Irritancy: Eye: this material has been classified as not corrosive or irritating to eyes. Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

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Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 2 Hazard.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as non-hazardous. Acute toxicity estimate (based on ingredients): >100 mg/L

Long-term aquatic hazard: This material has been classified as non-hazardous. Non-rapidly or rapidly degradable substance for which there are adequate chronic toxicity data available OR in the absence of chronic toxicity data, acute toxicity estimate (based on ingredients): >100 mg/L, where the substance is not rapidly degradable and/or BCF < 500 and/or log Kow < 4.

Eco toxicity: No information available.

Persistence and degradability: No information available.

Bio accumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible, material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Not classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

MARINE TRANSPORT

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

AIR TRANSPORT

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

15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Product Name: GLY-PRO™ MG HTF

Montreal Protocol (Ozone depleting substances)

The Stockholm Convention (Persistent Organic Pollutants) The Rotterdam Convention (Prior Informed Consent) Basel Convention (Hazardous Waste)

International Convention for the Prevention of Pollution from Ships (MARPOL)

This material/constituent(s) is covered by the following requirements:

- The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) established under the Therapeutic Goods Act (Commonwealth).
- All components of this product are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

The information in this safety data sheet (SDS) is believed to be correct as of the date issued. This product was classified according to globally harmonised system of classification and labelling of chemicals (GHS) revision version 07.

Glycol Sales Australia/NZ makes no warranties, expressed or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose or course of performance or usage of trade.

User is responsible for determining whether the product is fit for purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of this product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

For this reason, Glycol Sales Australia/NZ always recommends a user perform a test patch or trial in small scale or in an inconspicuous area prior to full application to limit possible damage. Testing before beginning any project is also the best way to ensure product effectiveness.

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