SAFETY DATA SHEET

Product Name: GLY-PRO™ Cleaner

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™ Cleaner™**
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™ Cleaner is a high-performance cleaning fluid designed to effectively remove grease and oil build-up from internal pipework commonly used in HVAC, secondary refrigeration
Systems and associated plant and equipment.

2. HAZARDS IDENTIFICATION

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

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H318 - Causes serious eye damage H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER, a doctor
P501 - Dispose in a safe manner in accordance with local/national regulations

2.3 Other Hazards
No additional information available

1.3% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 3.18% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

23.36% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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
4-Nonylphenol, branched, ethoxylated	(CAS-No.) 127087-87-0	10 - 30
Sodium Xylene Sulphonate	(CAS-No.) 1300-72-7	5 - 10
Potassium Nitrate	(CAS-No.) 7757-79-1	1 - 5
Tetrapotassium Pyrophosphate Anhydrous	(CAS-No.) 7320-34-5	1 - 5
Silicic Acid, sodium salt	(CAS-No.) 1344-09-8	1 - 5

Full text of H-phrases: see section 16

4. FIRST AID MEASURES

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

General: Never give anything by mouth to an unconscious person.

Inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

Skin Contact: Wash skin with soap and water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: Not applicable.

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Specific hazards: Non-combustible material.

Firefighting further advice: Do not enter fire area without proper protective equipment, including respiratory protection

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: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Wash hands, forearms and face thoroughly after handling.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Keep only in the original container in a cool, well-ventilated place. Keep container closed when not in use. See Incompatible product section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:	ppm	TWA mg/m3	ppm	STEL mg/m3	NOTICES
Phosphoric acid		1	-	3	

Emergency exposure limits:				
Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
nonylphenol, ethoxylated	Glycols, polyethylene, mono(p-nonylphenyl) ether	4.5 mg/m3	49 mg/m3	300 mg/m3
nonylphenol, ethoxylated	Ethoxylated nonylphenol; (Nonyl phenyl polyethylene glycol ether)	mg/m3	11 mg/m3	260 mg/m3
N-(2-hydroxy)ethylenediaminetriacetic acid, trisodium salt	Trisodium N-hydroxyethylethylenediaminetriacetate; (Trisodium N-(2-hydroxyethyl)ethylenediaminetriacetate)	30 mg/m3	330 mg/m3	2,000 mg/m3
phosphoric acid	Phosphoric acid	Not Available	Not Available	Not Available

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.

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

pH	10.5 - 11.5 at 10% dilution
Relative evaporation rate (butyl acetate=1)	No data available
Melting point	No data available
Freezing point	-3 °C
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available

Vapour pressure	No data available
Relative vapour density at 20 °C	≥ 1
Relative density	1.1
Specific gravity / density	1.1 g/ml
Solubility	Water: 100 %
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosion limits	No data available
VOC content	Not Available

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

10. STABILITY AND REACTIVITY

Reactivity: No additional information available

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

Conditions to avoid: Direct sunlight. Extremely high or low temperatures.

Incompatible materials: Strong bases. Strong acids

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

Hazardous reactions: No known hazardous reactions.

11. TOXICOLOGICAL INFORMATION

4-Nonylphenol, branched, ethoxylated (127087-87-0)	
LD50 oral rat	3314 mg/kg
LD50 dermal rabbit	> 3000 mg/kg
ATE US (oral)	3314.000 mg/kg body weight
Sodium Xylene Sulphonate (1300-72-7)	
LD50 oral rat	1000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

ATE US (oral)	1000.000 mg/kg body weight
Potassium Nitrate (7757-79-1)	
LD50 oral rat	3015 mg/kg
Potassium Nitrate (7757-79-1)	
LD50 dermal rat	> 5000 mg/kg
ATE US (oral)	3015.000 mg/kg body weight
Tetrapotassium Pyrophosphate Anhydrous (7320-34-5)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 1.1 mg/l
Silicic Acid, sodium salt (1344-09-8)	
LD50 oral rat	1960.000 mg/kg body weight
ATE US (oral)	

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 Toxicity: Not classified

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: Causes serious eye damage.

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

Skin contact: This material has been classified as non-hazardous.

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

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

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

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: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Long-term aquatic hazard: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Eco toxicity:

4-Nonylphenol, branched, ethoxylated (127087-87-0)	
LC50 fish 1	7.6 mg/l
Potassium Nitrate (7757-79-1)	
EC50 Daphnia 1	490 mg/l
Tetrapotassium Pyrophosphate Anhydrous (7320-34-5)	
LC50 fish 1	> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: water flea)
Silicic Acid, sodium salt (1344-09-8)	
LC50 fish 1	301 - 478 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
LC50 other aquatic organisms 1	494 ml/l Daphnia Magna
EC50 other aquatic organisms 1	0.4 mg/l Ceriodaphnia dubia - Neonate
LC50 fish 2	3185 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [semi-static])

Persistence and degradability: May cause long-term adverse effects in the environment. 60 % biodegradation - Not Readily - 28 days.

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. Avoid release to the environment.

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:
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 the 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 the 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.

Glycol Sales Australia/NZ provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, Glycol Sales Australia/NZ makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from Glycol Sales Australia/NZ. It is the user responsibility to ensure they have the most current information available.

Full text of H-phrases:

H272	May intensify fire; oxidizer
H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H401	Toxic to aquatic life

H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H272	May intensify fire; oxidizer
H302	Harmful if swallowed