

SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: ANTIFREEZE

Recommended Use: Engine and Refrigerator Coolant

Supplier: TMK Packers Ltd

Address: 2/20 Trugood Drive, East Tamaki.
PO Box 258 031, Botany, Manukau 2163

Telephone: (+64) 9 273 3753

Facsimile: (+64) 9 273 3752

Website: www.tmkpackers.co.nz

Emergency phone: National Poisons Centre
0800 POISON [0800 764 766]



2. HAZARDS IDENTIFICATION

Product is classified as hazardous according to Schedules 1 to 6 of the *Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001* of the HSNO Act, 1996.

HSNO Classifications: 6.1D (oral), 6.4A, 6.9A, 9.3C



Signal word: DANGER

Hazard Statements:

H303 May be harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H316 Causes mild skin irritation.
H320 Causes eye irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long-lasting effects.

Prevention Statements:

P102 Keep out of reach of children.
P103 Read label before use.
P240 Ground container and receiving equipment.



P260 Do not breathe fume/vapours.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective clothing, gloves and eye protection.

Response Statements:

P101 If medical advice is needed, have product container or label at hand.

P314 Get medical advice if you feel unwell.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor.
Rinse mouth

P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.

P332 + P313 If skin irritation occurs: Get medical advice.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation occurs: Get medical advice.

Storage Statements:

P403 + P235 Store in a well-ventilated.

Disposal Statement:

P501 Dispose of product and containers in accordance with local regulations.

3. COMPOSITION: Information on Ingredients

Chemical Ingredient	CAS No.	Proportion (%)
Mono Ethylene Glycol	107-21-1	75-85
Corrosion inhibitor		10-15
Dye		0.1
Water	7732-18-5	Balance

4. FIRST AID MEASURES

For advice, contact National Poisons Centre (0800 POISON; 0800 764 766) or a doctor.
Have product container or label available. Get medical advice if you feel unwell.

Swallowed

If swallowed, do NOT induce vomiting. Rinse mouth. Where there is risk of vomiting, lean person forward or place on left side to avoid aspiration of product into lungs. Obtain immediate medical attention.



Skin Contact

If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation persists, get medical attention.

Eye Contact

Hold eyelids apart and flush the eye continuously with running water. Continue flushing for at least 15 minutes. Remove contact lenses if present and easy to do, after the first 5 minutes and continue rinsing. Get medical attention if irritation persists.

Inhalation

Move the victim to fresh air immediately. Keep warm and at rest until recovered. Get medical attention if symptoms continue. Begin artificial respiration if breathing has stopped. Get immediate medical attention.

First Aid facilities

Provide eye baths and safety showers close to areas where splashing may occur.

Advice to doctor

Treat according to symptoms. Gastric lavage may be indicated if ingested. Risk of aspiration into lungs with potential to cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

Flammable limits: LFL: not available UFL: not available

Extinguishing media: Dry chemical or alcohol foam or CO₂.

Fire & Explosion hazards:

Not Combustible. However, following evaporation of aqueous component, residual material can burn if ignited. While burning, it will emit toxic fumes including carbon monoxide and carbon dioxide.

Firefighting Equipment:

Full protective clothing and self-contained breathing apparatus (SCBA).

In event of fire:

- Alert Fire Bridge (111); advise location and nature of hazard.
- Wear breathing apparatus and protective gloves.
- Shut off product that may 'fuel' a fire if safe to do so.
- If safe, switch off electrical equipment until vapour hazard removed.
- Allow trained personnel to attend a fire in progress, providing fire-fighters with this Safety Data Sheet.
- Prevent product and extinguishing media from escaping to drains and waterways.

Hazards from combustion products: Carbon dioxide, carbon monoxide.

Hazchem Code: None Assigned

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures & Containment:

Refer to "Fire Fighting Measures", "First Aid Measures" and "Stability and Reactivity".

Emergency Precautions:



Personnel involved in the clean up should wear full protective clothing. Evacuate all unnecessary personnel. Increase ventilation. Avoid walking through spilled product as it may be slippery. Stop leak if safe to do so. Do not let product reach drain or waterway; advise the Environmental protection authority or your local waste management. Use Clean, non-sparking tools and equipment.

Methods and Materials for containment and Clean up:

Soak up spilled product using absorbent, non-combustible material such as sand or soil. Avoid using sawdust or cellulose. When saturated, collect material into suitable, labelled, dry, sealable containers and hold for safe disposal. Once pick-up is complete, flush spill site with plenty of water to eliminate any residue. Hold contaminated water for treatment/disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:

Wash thoroughly after handling. Avoid contact with eyes. Keep Container tightly closed. Always wash hands before smoking, eating or using the toilet. Wash Contaminated clothing and other protective equipment before storage or re-use. Do not dispose of material to sewers or waterways.

Conditions for safe storage:

Store in a tightly closed container. Keep from contact with oxidizing agents. Store in a cool dry well-ventilated area away from any incompatible substance (if applicable). Keep container closed at all times and check regularly for leaks.

8. EXPOSURE CONTROLS: PERSONAL PROTECTION

Health Exposure Standards:

The Occupational Safety and Health Service, NZ Department of Labour have set no Tolerable Exposure Limited (TEL) Workplace Exposure Standards (WES) for this substance.

Biological limit values:

None Established

Engineering Controls:

Ventilation:

Use product outdoors or in well-ventilated area. If using product in commercial or industrial situations where concentrations in air may exceed the limits described in the Workplace Exposure Standards The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation in confined spaces. Use explosion-proof ventilation equipment.

Personal Protective Equipment:

Respiratory Protection:

When using product in commercial or industrial situations where concentrations in air may exceed the limits described in the Workplace 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:

Protect eyes from splashes, aerosols or vapour. It is recommended safety glasses with side shields or goggles be worn where there is risk of splashes.

Skin/ Body Protection:

If using product in commercial or industrial situations, wear chemical resistant gloves, e.g. PVC, nitrile rubber, also safety footwear or safety gumboots, e.g. rubber. Always wear long sleeves and long trousers or coveralls.



9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Unit of measurement	Typical value
Appearance	-	Fluorescent Green
Odour	-	Odourless
Flash Point	°C	Not applicable
Specific gravity @ 20°C	g/ml	1.12
Vapour Pressure @ 20°C	mm Hg	Not available
Vapour Density @ 20°C	kPa	Not available
Boiling Point	°C	>250
Freezing Point	°C	<= 50
Volatiles	%vol/vol	Not available
Alkalinity/acidity (as pH)	-	6.5-7.5
Solubility in Water	% w/w	Soluble in Water

The values listed are indicative of this product's physical and chemical properties.

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: No decomposition products except on burning. See "Fire Fighting Measures" and "Hazardous Reactions".

Hazardous reactions: Oxidizing agents, strong alkalis, strong mineral acids, bromine.

11. TOXICOLOGICAL INFORMATION

Acute Effects

Ingestion

Small amounts of liquid aspirated into lungs during ingestion, or from vomiting. Ingestion of large amounts of this product will result in headaches, nausea, dizziness and tracheal burning.

Eye Contact

This product is irritating, and pain followed by swelling to the conjunctiva.

Skin Contact

This product is irritating to skin.

Inhalation

Irritating to respiratory tract. Exposure to high concentrations over an extended period of time may result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations and possible loss of consciousness.

No Adverse health effects expected if the product is handled in accordance with the safety data sheet.

Symptoms or effects that MAY arise if the product is mishandled and the overexposure occurs are:

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Persistence/degradability: The Substance is expected to be readily biodegradable.

Mobility: No data available for this product

Other information: None



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.

14. TRANSPORT INFORMATION

Road and Rail Transport:

Not classified as Dangerous Goods by the criteria of New Zealand Dangerous Goods Code for transport by road and rail

Marine Transport:

Not Classified as Dangerous Goods by the criteria of international maritime Dangerous Goods Code for Transport by sea.

Air Transport:

Not Classified as Dangerous Goods by the criteria of international Air Association Dangerous Goods Regulations for transport by air.



15. REGULATORY INFORMATION

HSNO Approval NO: HSR0002684
Group Standard: Water Treatment Chemicals Group Standards 2006
HSNO Classification: 6.1D, 6.4A, 6.9A, 9.3C

16. OTHER INFORMATION

Issue number: 1
Date of Issue: 23rd March 2023
Reasons for Issue: New Safety Data Sheet
Replaces: -

References:

Supplier Material Safety Data Sheets
EPA website: www.epa.govt.nz

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 TMK Packers Ltd.

END OF SAFETY DATA SHEET

