

---

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

---

### 1.1 Product identifier

**Product name** COOLANT PREMIX  
**Synonyms** ANTIFREEZE • GLYCOL COOLANT

### 1.2 Uses and uses advised against

**Uses** ANTIFREEZE • COOLANT • RADIATOR COOLANT

### 1.3 Details of the supplier of the product

**Supplier name** LIBERATO BULK CHEMICAL & REPACK SPECIALISTS PTY. LTD.  
**Address** 1 Kalinga Way, Landsdale, WA, 6065, AUSTRALIA  
**Telephone** 1300 377 696  
**Email** [sales@liberato.com.au](mailto:sales@liberato.com.au)  
**Website** <http://www.liberato.com.au>

### 1.4 Emergency telephone numbers

**Emergency** 1300 377 696

---

## 2. HAZARDS IDENTIFICATION

---

### 2.1 Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

#### **Physical Hazards**

Not classified as a Physical Hazard

#### **Health Hazards**

Acute Toxicity: Oral: Category 4

#### **Environmental Hazards**

Not classified as an Environmental Hazard

### 2.2 GHS Label elements

**Signal word** WARNING

#### **Pictograms**



#### **Hazard statements**

H302 Harmful if swallowed.

#### **Prevention statements**

P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.

#### **Response statements**

P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.  
P330 Rinse mouth.

#### **Storage statements**

None allocated.

**PRODUCT NAME COOLANT PREMIX**

**Disposal statements**

P501 Dispose of contents/container in accordance with relevant regulations.

**2.3 Other hazards**

No information provided.

---

**3. COMPOSITION/ INFORMATION ON INGREDIENTS**

---

**3.1 Substances / Mixtures**

| Ingredient                       | CAS Number | EC Number | Content   |
|----------------------------------|------------|-----------|-----------|
| ADDITIVE(S)                      | -          | -         | Remainder |
| ETHYLENE GLYCOL (1,2-ETHANEDIOL) | 107-21-1   | 203-473-3 | 45 to 49% |

---

**4. FIRST AID MEASURES**

---

**4.1 Description of first aid measures**

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. To protect rescuer, use a Type A (Organic vapour) respirator or an Air-line respirator (in poorly ventilated areas). Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.

**Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

**First aid facilities** Eye wash facilities and safety shower should be available.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Immediate medical attention and special treatment needed**

Treat symptomatically.

---

**5. FIRE FIGHTING MEASURES**

---

**5.1 Extinguishing media**

Dry agent, carbon dioxide or foam. Prevent contamination of drains and waterways.

**5.2 Special hazards arising from the substance or mixture**

Combustible. May evolve carbon oxides and hydrocarbons when heated to decomposition. Vapour may form explosive mixtures with air.

**5.3 Advice for firefighters**

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

**5.4 Hazchem code**

None allocated.

---

**6. ACCIDENTAL RELEASE MEASURES**

---

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Clear area of all unprotected personnel. Ventilate area where possible. Contact emergency services where appropriate.

**6.2 Environmental precautions**

Prevent product from entering drains and waterways.

**6.3 Methods of cleaning up**

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

**6.4 Reference to other sections**

See Sections 8 and 13 for exposure controls and disposal.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills.

**7.3 Specific end uses**

No information provided.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

**Exposure standards**

| Ingredient                    | Reference | TWA |                   | STEL |                   |
|-------------------------------|-----------|-----|-------------------|------|-------------------|
|                               |           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |
| Ethylene glycol (particulate) | SWA [AUS] | --  | 10                | --   | --                |
| Ethylene glycol (vapour)      | SWA [AUS] | 20  | 52                | 40   | 104               |

**Biological limits**

No biological limit values have been entered for this product.

**8.2 Exposure controls**

**Engineering controls**

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain vapour levels below the recommended exposure standard.

**PPE**

- Eye / Face**      Wear splash-proof goggles.
- Hands**            Wear rubber or butyl or neoprene gloves.
- Body**              Wear coveralls.
- Respiratory**      Where an inhalation risk exists, wear a Type A (Organic vapour) respirator. If spraying, wear a Type A-Class P1 (Organic gases/vapours and Particulate) respirator.



**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

|                           |                          |
|---------------------------|--------------------------|
| <b>Appearance</b>         | VISCOUS GREEN LIQUID     |
| <b>Odour</b>              | ODOURLESS                |
| <b>Flammability</b>       | CLASS C2 COMBUSTIBLE     |
| <b>Flash point</b>        | 116.1°C (cc)             |
| <b>Boiling point</b>      | 197°C                    |
| <b>Melting point</b>      | -13°C                    |
| <b>Evaporation rate</b>   | NOT AVAILABLE            |
| <b>pH</b>                 | 7.5 to 8.5 (1% Solution) |
| <b>Vapour density</b>     | 2.1 (Air = 1)            |
| <b>Relative density</b>   | 1.115 to 1.145           |
| <b>Solubility (water)</b> | SOLUBLE                  |
| <b>Vapour pressure</b>    | 0.06 mm Hg @ 20°C        |

**9.1 Information on basic physical and chemical properties**

|                           |               |
|---------------------------|---------------|
| Upper explosion limit     | 15.3 %        |
| Lower explosion limit     | 3.2 %         |
| Partition coefficient     | NOT AVAILABLE |
| Autoignition temperature  | 412°C         |
| Decomposition temperature | NOT AVAILABLE |
| Viscosity                 | NOT AVAILABLE |
| Explosive properties      | NOT AVAILABLE |
| Oxidising properties      | NOT AVAILABLE |
| Odour threshold           | NOT AVAILABLE |

**9.2 Other information**

|             |     |
|-------------|-----|
| % Volatiles | 0 % |
|-------------|-----|

**10. STABILITY AND REACTIVITY****10.1 Reactivity**

Carefully review all information provided in sections 10.2 to 10.6.

**10.2 Chemical stability**

Stable under recommended conditions of storage.

**10.3 Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.4 Conditions to avoid**

Avoid shock, friction, heavy impact, heat, sparks, open flames and other ignition sources.

**10.5 Incompatible materials**

Incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide) and phosphorus pentasulphide.

**10.6 Hazardous decomposition products**

May evolve carbon oxides and hydrocarbons when heated to decomposition.

**11. TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute toxicity Harmful if swallowed.

**Information available for the ingredients:**

| Ingredient                       | Oral LD50                            | Dermal LD50         | Inhalation LC50   |
|----------------------------------|--------------------------------------|---------------------|-------------------|
| ETHYLENE GLYCOL (1,2-ETHANEDIOL) | 1670 mg/kg (cat); > 2000 mg/kg (rat) | 9530 mg/kg (rabbit) | 10876 mg/kg (rat) |

|                                 |   |
|---------------------------------|---|
| <b>Skin</b>                     | Contact may result in drying and defatting of the skin, rash and dermatitis.  |
| <b>Eye</b>                      | Contact may result in irritation, lacrimation, pain and redness.  |
| <b>Sensitisation</b>            | Not classified as causing skin or respiratory sensitisation.  |
| <b>Mutagenicity</b>             | Insufficient data available to classify as a mutagen.   |
| <b>Carcinogenicity</b>          | Insufficient data available to classify as a carcinogen.  |
| <b>Reproductive</b>             | Insufficient data available to classify as a reproductive toxin.  |
| <b>STOT - single exposure</b>   | Over exposure may result in mild respiratory irritation. High level exposure may result in headache, nausea, dizziness and central nervous system (CNS) depression. |
| <b>STOT - repeated exposure</b> | Repeated exposure to some glycols may result in kidney damage.  |
| <b>Aspiration</b>               | Not classified as causing aspiration.   |

**12. ECOLOGICAL INFORMATION**

## PRODUCT NAME COOLANT PREMIX

### 12.1 Toxicity

Ethylene glycol has moderate toxicity to aquatic life on both a short term and long-term basis.

### 12.2 Persistence and degradability

In water and soil ethylene glycol is expected to degrade in several days to a week. The major degradation product is hydroxyacetaldehyde. Biodegradable.

### 12.3 Bioaccumulative potential

Ethylene glycol is not expected to bioaccumulate.

### 12.4 Mobility in soil

Miscible in water, and likely to be transported considerable distances in soil.

### 12.5 Other adverse effects

No information provided.

---

## 13. DISPOSAL CONSIDERATIONS

---

### 13.1 Waste treatment methods

**Waste disposal** Dispose of by controlled incineration, by licensed or competent personnel. Contact the manufacturer/supplier for additional information (if required). Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.

**Legislation** Dispose of in accordance with relevant local legislation.

---

## 14. TRANSPORT INFORMATION

---

### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

|                                    | LAND TRANSPORT (ADG) | SEA TRANSPORT (IMDG / IMO) | AIR TRANSPORT (IATA / ICAO) |
|------------------------------------|----------------------|----------------------------|-----------------------------|
| <b>14.1 UN Number</b>              | None allocated.      | None allocated.            | None allocated.             |
| <b>14.2 Proper Shipping Name</b>   | None allocated.      | None allocated.            | None allocated.             |
| <b>14.3 Transport hazard class</b> | None allocated.      | None allocated.            | None allocated.             |
| <b>14.4 Packing Group</b>          | None allocated.      | None allocated.            | None allocated.             |

### 14.5 Environmental hazards

No information provided.

### 14.6 Special precautions for user

**Hazchem code** None allocated.

---

## 15. REGULATORY INFORMATION

---

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Poison schedule** Classified as a Schedule 5 (S5) Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

**Classifications** Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

**Inventory listings** **AUSTRALIA: AIC (Australian Inventory of Industrial Chemicals)**  
All components are listed on AIC, or are exempt.

---

## 16. OTHER INFORMATION

---

**Additional information** ETHYLENE GLYCOL: Has been reported to cause teratogenic and mutagenic effects, however the doses recorded for these effects are extremely high. For example experimental rat studies by the oral route have shown that ingestion of 8.5 g/kg by pregnant rats in their 6-15 day of gestation caused teratogenic effects. This equates to the ingestion of 500 ml of ethylene glycol by a 60 kg women for similar effects to occur. Exposure at such levels is not reported in industry.

**RESPIRATORS:** In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

**STORAGE OF COMBUSTIBLE LIQUIDS.** Combustible liquids with a flash point between 61°C and 150°C are required to be stored as for flammable liquids (Dangerous Goods Class 3) under AS 1940. [Refer to Australian Standard 1940, Storage and Handling of Flammable and Combustible Liquids, for full storage guidelines].

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:**

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:**

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

**Abbreviations**

|                   |   |
|-------------------|---|
| ACGIH             | American Conference of Governmental Industrial Hygienists                                       |
| CAS #             | Chemical Abstract Service number - used to uniquely identify chemical compounds                 |
| CNS               | Central Nervous System  |
| EC No.            | EC No - European Community Number   |
| EMS               | Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)                   |
| GHS               | Globally Harmonized System  |
| GTEPG             | Group Text Emergency Procedure Guide  |
| IARC              | International Agency for Research on Cancer   |
| LC50              | Lethal Concentration, 50% / Median Lethal Concentration   |
| LD50              | Lethal Dose, 50% / Median Lethal Dose   |
| mg/m <sup>3</sup> | Milligrams per Cubic Metre  |
| OEL               | Occupational Exposure Limit   |
| pH                | relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). |
| ppm               | Parts Per Million   |
| STEL              | Short-Term Exposure Limit   |
| STOT-RE           | Specific target organ toxicity (repeated exposure)  |
| STOT-SE           | Specific target organ toxicity (single exposure)  |
| SUSMP             | Standard for the Uniform Scheduling of Medicines and Poisons                                    |
| SWA               | Safe Work Australia   |
| TLV               | Threshold Limit Value   |
| TWA               | Time Weighted Average   |

**Report status**

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

While RMT 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, RMT 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.

**PRODUCT NAME COOLANT PREMIX**

**Prepared by**

Risk Management Technologies  
5 Ventnor Ave, West Perth  
Western Australia 6005  
Phone: +61 8 9322 1711  
Fax: +61 8 9322 1794  
Email: [info@rmt.com.au](mailto:info@rmt.com.au)  
Web: [www.rmtglobal.com](http://www.rmtglobal.com)

**[ End of SDS ]**