



SAFETY DATA SHEET

SECTION 1 IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

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| Product Identifier | RECO-COOL HD PREMIUM-N PRE-DILUTED 50% ANTIFREEZE/COOLANT |
| Other Names | Glycol coolant, Antifreeze |
| Manufacturer's Product Code | 19650 |
| Recommended Use | Radiator antifreeze, Coolant |

Details of Supplier/Manufacturer

| | |
|----------|---|
| Company: | Recochem Inc. ABN: 69 010 485 999 |
| Address: | 1809 Lytton Road, Lytton, Queensland 4178 |
| Phone: | (07) 3308 5200 Fax: (07) 3308 5201 |
| Website: | www.recochem.com.au |


Emergency Telephone Numbers

| | |
|----------------------|---|
| Business Hours: | (07) 3308 5200 |
| After Hours: | 1300 131 001 |
| Poisons Information: | Australia: 13 11 26 New Zealand: 0800 764 766 |

SECTION 2 HAZARDS IDENTIFICATION

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| Hazardous chemical | <i>according to classification by Safe Work Australia</i> |
| Non-dangerous goods | <i>according to the Australian Code for the Transport of Dangerous Goods by Road and Rail</i> |

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| Signal Word | WARNING |
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| Hazardous chemical classification | Pictogram | Hazard statement |
|--|---|---------------------------|
| Acute Toxicity - Oral, Category 4 |  EXCLAMATION MARK | H302 Harmful if swallowed |

Precautionary statements:

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| GENERAL | |
| P101 | If medical advice is needed, have product container or label at hand |
| P102 | Keep out of reach of children |
| P103 | Read label before use |
| PREVENTATIVE | |
| P264 | Wash thoroughly after handling |

Product: RECO-COOL HD PREMIUM-N PRE-DILUTED 50% ANTIFREEZE/COOLANT

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| P270 | Do not eat, drink or smoke when using this product |
| RESPONSE | |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell |
| P330 | Rinse mouth |
| DISPOSAL | |
| P501 | Dispose of contents/container in accordance with local regulations |

SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS**Ingredients Names and Proportions**

| Chemical Entity | CAS Number | Proportion (%) |
|-----------------|------------|----------------|
| Ethylene Glycol | 107-21-1 | 45 - 55 |

SECTION 4 FIRST AID MEASURES**Description of necessary first aid measures**

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| Inhalation: | Keep victim calm and remove to fresh air if safe to do so. If rapid recovery does not occur, transport to nearest medical facility for additional treatment |
| Skin Contact: | If skin contact occurs, remove contaminated clothing and wash skin thoroughly with water and follow by washing with soap if available. If irritation persists, seek medical attention |
| Eye Contact: | If in eyes, hold eyes open, flood with water for at least 15 minutes. If irritation persists, seek medical attention |
| Ingestion: | If swallowed, do NOT induce vomiting. Have conscious person drink several glasses of water or milk. SEEK IMMEDIATE MEDICAL ATTENTION |

Symptoms caused by exposure

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| Inhalation: | May include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing |
| Skin: | May include burning sensation, redness, swelling and/or blisters |
| Eye: | May include burning sensation, redness, swelling and/or blurred vision |
| Ingestion: | May include nausea, vomiting, abdominal cramps, diarrhoea, lumbar pain shortly after ingestion, and possibly narcosis and death. Kidney toxicity may be recognized by blood in the urine or increased or decreased urine flow |

Medical attention and special treatment

Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES**Suitable extinguishing equipment**

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.

Specific hazards arising from the chemical

Carbon dioxide and/or carbon monoxide may be evolved if incomplete combustion occurs. Material will not burn unless preheated. When heated to decomposition, emits acrid smoke and irritating fumes. Not a product presenting risks of explosion.

Special protective equipment and precautions for fire fighters

Wear full protective clothing and self-contained breathing apparatus.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled or released material. Do NOT ingest. Shut off leaks, if possible without personal risks. Isolate hazard area and deny entry to unnecessary or unprotected personnel. Remove all sources of ignition in the surrounding area. Ventilate contaminated area thoroughly.

Environmental precautions

Use appropriate containment to avoid environmental contamination. Prevent from spreading and entering waterways using sand, earth or other appropriate barriers.

Methods and materials for containment and cleaning up

For small spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

For larger spills (> 1 drum), transfer by means such as a vacuum truck to a salvage tank for recovery or disposal. Do not flush residues with water. Retain as contaminated waste. Allow any residues to evaporate or use an appropriate absorbent material and dispose of safely.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Avoid breathing vapours. Do NOT ingest. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Do not eat, drink or smoke in contaminated areas. Handle and open containers with care in a well-ventilated area. Ensure that the workplace is ventilated such that the Occupational Exposure limit is not exceeded. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near strong oxidisers.

SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure control measures

From National Occupational Health & Safety Commission (NOHSC) Worksafe Australia -
Monoethylene glycol: 52mg/m³ (20ppm) TWA (vapour), 104mg/m³ (40ppm) STEL (vapour) and 10mg/m³ TWA (particulate)

Biological monitoring

No biological limit allocated.

Engineering controls

Ensure that adequate ventilation is provided. Maintain air concentrations below recommended exposure standards. Avoid generating and inhaling mists and vapours. Keep containers closed when not in use.

Individual protection measures

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| Eye and face protection: | Wear safety goggles. |
| Skin protection: | Use solvent resistant gloves, nitrile for longer term protection or PVC and neoprene for incidental splashes. |
| Respiratory protection: | If work practices do not maintain airborne level below the exposure standard, use appropriate respiratory protection equipment. When using respirators, select an appropriate combination of mask and filter. Select a filter for organic gases and vapours (boiling point > 65°C). Respirators should comply with AS1716 or an equivalent approved by a state/territory authority. |
| Thermal hazards: | Not applicable. |

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Yellow viscous liquid |
| Odour: | None |
| Odour threshold (ppm): | Data not available |
| pH: | 7.5 - 8.5 (1% in water) |
| Melting point/freezing point (°C): | -37 |
| Initial boiling point and boiling range (°C): | 107 - 108 |
| Flash point (°C): | Data not available |
| Evaporation rate (Butyl acetate = 1): | 0.01 |
| Flammability: | Not flammable |
| Upper/lower flammability or explosive limits (%): | Data not available |
| Vapour pressure (mmHg @ 20°C): | 0.06 |
| Vapour density (air = 1): | 2.1 |
| Density (g/ml @ 15°C): | 1.07 - 1.08 |
| Solubility: | Soluble in water, methanol, diethyl ether |
| Partition coefficient: n-octanol/water: | Data not available |
| Auto-ignition temperature (°C): | Data not available |
| Decomposition temperature (°C): | Data not available |
| Kinematic viscosity (mm ² /s @ 20°C): | Data not available |

SECTION 10 STABILITY AND REACTIVITY

Reactivity

Stable under normal conditions of use.

Chemical stability

Stable under normal conditions of use.

Possibility of hazardous reactions

Stable under normal conditions of use.

Conditions to avoid

High temperatures.

Incompatible materials

Strong oxidising agents, strong acids, strong alkalis.

Hazardous decomposition products

Burning can produce carbon monoxide and/or carbon dioxide.

SECTION 11 TOXICOLOGICAL INFORMATION

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| Acute toxicity: | Low toxicity in animals - LD50 Oral (rat) = 4700mg/kg LD50 Dermal (rabbit) = 9530mg/kg Note that there is a marked difference in acute oral toxicity between |
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| | animals and humans, humans being more susceptible than animals. The estimated fatal dose for humans is 100ml |
| Skin corrosion/irritation: | May cause skin irritation; prolonged contact may cause dermatitis |
| Serious eye damage/irritation: | May cause eye irritation |
| Respiratory or skin sensitisation: | Not expected to be a sensitiser |
| Germ cell mutagenicity: | No evidence of mutagenic activity |
| Carcinogenicity: | Not carcinogenic in animal studies |
| Reproductive toxicity: | Not expected to impair fertility |
| Specific Target Organ Toxicity (STOT) – single exposure: | May cause drowsiness or dizziness. Inhalation of vapours or mists may cause irritation to the lungs and respiratory system |
| Specific Target Organ Toxicity (STOT) – repeated exposure: | May cause damage to organs or organ systems through prolonged or repeated exposure. Toxic to liver and kidneys |
| Aspiration hazard: | Not considered an aspiration hazard |

SECTION 12 ECOLOGICAL INFORMATION**Ecotoxicity**

Acute toxicity:

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|------------------------|------------------------------------|
| Fish – | Low toxicity: LC/EC/IC50 > 100mg/l |
| Aquatic invertebrate – | Low toxicity: LC/EC/IC50 > 100mg/l |
| Algae – | Low toxicity: LC/EC/IC50 > 100mg/l |
| Microorganisms – | Low toxicity: LC/EC/IC50 > 100mg/l |

Chronic toxicity:

| | |
|------------------------|---------------------|
| Fish – | NOEC/NOEL > 100mg/l |
| Aquatic invertebrate – | NOEC/NOEL > 100mg/l |
| Algae – | No data available |
| Microorganisms – | No data available |

Persistence and degradability

Biodegradable.

Bioaccumulative potential

Does not bioaccumulate significantly.

Mobility in soil

Dissolves in water. If product enters soil, one or more constituents will be mobile and may contaminate groundwater.

Other adverse effects

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS

Ensure waste disposal conforms to local waste disposal regulations.

SECTION 14 TRANSPORT INFORMATION

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|--|----------------|
| UN number: | Not applicable |
| Proper shipping name: | Not applicable |
| Australian Dangerous Goods class: | Not applicable |
| Australian Dangerous Goods packing group: | Not applicable |
| Hazchem code: | Not applicable |

SECTION 15 REGULATORY INFORMATION

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|---|----------------|
| Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP), Poisons Schedule: | 5 |
| Australian Inventory of Chemical Substances (AICS): | Listed |
| Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76): | Not applicable |

SECTION 16 OTHER INFORMATION

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|----------------------------------|----------------------------|
| Date of preparation: | 03/07/2014 |
| Revision number: | 2 |
| Changes in this revision: | Update to GHS SDS standard |

This MSDS summarises product safety information at the date of issue, to the best of our knowledge, as a general guide. Recochem cannot anticipate or control the conditions under which the product is used, so prior to usage each user must assess and control the risks associated with their use of the product. Users should also consult the relevant legislation governing the use and storage of this product. We make no warranties, express or implied, and assume no liability in connection with any use of information contained within this document. If clarification or further information is needed, the user should contact Recochem on (07) 3308 5200.
