# TRP ALLCool Coolant Premixed PACCAR Parts a Division of PACCAR Australia Pty Ltd

Chemwatch: 62-2365 Version No: 7.1.16.10

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Issue Date: 31/08/2021 Print Date: 31/08/2021 S.GHS.AUS.EN

## SECTION 1 Identification of the substance / mixture and of the company / undertaking

### **Product Identifier**

| Product name                  | TRP ALLCool Coolant Premixed   |  |
|-------------------------------|--|--|
| Chemical Name                 | Not Applicable   |  |
| Synonyms                      | Not Available  |  |
| Proper shipping name          | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ethylene glycol) |  |
| Chemical formula              | Not Applicable   |  |
| Other means of identification | Not Available  |  |

### Relevant identified uses of the substance or mixture and uses advised against

| Relevant identified uses | Use according to manufacturer's directions. |
|--------------------------|---|

## Details of the supplier of the safety data sheet

| Registered company name | PACCAR Parts a Division of PACCAR Australia Pty Ltd |
|-------------------------|---|
| Address                 | 20 Canterbury Road Bayswater VIC 3153 Australia     |
| Telephone               | +613 9721 1500                                      |
| Fax                     | +613 9720 4144                                      |
| Website                 | www.paccarparts.com.au                              |
| Email                   | Not Available                                       |

| Emergency telephone number        |   |
|-----------------------------------|---|
| Association / Organisation        | PACCAR Parts a Division of PACCAR Australia Pty Ltd |
| Emergency telephone<br>numbers    | 131126 (Poisons Information Centre)                 |
| Other emergency telephone numbers | Not Available                                       |

## **SECTION 2 Hazards identification**

### Classification of the substance or mixture

## HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

| Poisons Schedule              | S6   |  |
|-------------------------------|--|--|
| Classification <sup>[1]</sup> | Acute Toxicity (Oral) Category 4, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment<br>Long-Term Hazard Category 2 |  |
| Legend:                       | 1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI                                 |  |

### Label elements

| Hazard pictogram(s) |         |
|---------------------|---------|
|                     |         |
| Signal word         | Warning |

### Hazard statement(s)

| H302 | Harmful if swallowed.  |
|------|--|
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects.                   |

### Precautionary statement(s) Prevention

| P260 | Do not breathe mist/vapours/spray.                              |
|------|---|
| P264 | Wash all exposed external body areas thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product.             |

P273 Avoid release to the environment.

### Precautionary statement(s) Response

| P314      | Get medical advice/attention if you feel unwell.                                    |
|-----------|---|
| P391      | Collect spillage.   |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider if you feel unwell. |
| P330      | Rinse mouth.  |

## Precautionary statement(s) Storage

Not Applicable

## Precautionary statement(s) Disposal

Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

### **SECTION 3 Composition / information on ingredients**

P501

### Substances

See section below for composition of Mixtures

### Mixtures

| CAS No    | %[weight]  | Name  |
|-----------|--|---|
| 107-21-1  | 45-48  | ethylene glycol   |
| 111-46-6  | 0-2  | diethylene glycol   |
| 7732-18-5 | 49-50  | water   |
| Legend:   | 1. Classified by Chemwatch; 2. Classification drawn from HC<br>Classification drawn from C&L * EU IOELVs available | 2IS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. |

## **SECTION 4 First aid measures**

| Description of first aid measures |   |  |
|-----------------------------------|---|--|
| Eye Contact                       | <ul> <li>If this product comes in contact with the eyes:</li> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>   |  |
| Skin Contact                      | If skin contact occurs: <ul> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>  |  |
| Inhalation                        | <ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul>   |  |
| Ingestion                         | <ul> <li>IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.</li> <li>For advice, contact a Poisons Information Centre or a doctor.</li> <li>Urgent hospital treatment is likely to be needed.</li> <li>In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.</li> <li>If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.</li> <li>If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.</li> <li>Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:         <ul> <li>INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> </ul> </li> <li>NOTE: Wear a protective glove when inducing vomiting by mechanical means.</li> </ul> |  |

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- ▶ To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
- Haemodialysis if coma is deep and persistent. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5)

### BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for shock.
- Monitor and treat, where necessary, for pulmonary oedema.
- Anticipate and treat, where necessary, for seizures.
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

#### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation

### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Acidosis may respond to hyperventilation and bicarbonate therapy.
- Haemodialysis might be considered in patients with severe intoxication.
- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

#### For C8 alcohols and above.

Symptomatic and supportive therapy is advised in managing patients.

### **SECTION 5 Firefighting measures**

#### Extinguishing media

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances. In such an event consider:

- foam.
- dry chemical powder.
- carbon dioxide.

### Special hazards arising from the substrate or mixture

Fire Incompatibility None known.

### Advice for firefighters

| Fire Fighting         | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>DO NOT approach containers suspected to be hot.</li> <li>Cool fire exposed containers with water spray from a protected location.</li> </ul>                                       |
|-----------------------|--|
| Fire/Explosion Hazard | <ul> <li>If safe to do so, remove containers from path of fire.</li> <li>The material is not readily combustible under normal conditions.</li> <li>However, it will break down under fire conditions and the organic component may burn.</li> <li>Not considered to be a significant fire risk.</li> <li>Heat may cause expansion or decomposition with violent rupture of containers.</li> <li>Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).</li> <li>May emit acrid smoke.</li> </ul> |
|                       | Decomposes on heating and produces toxic fumes of:<br>carbon dioxide (CO2)<br>other pyrolysis products typical of burning organic material.  |
| HAZCHEM               | • 3Z   |

### **SECTION 6 Accidental release measures**

### Personal precautions, protective equipment and emergency procedures

See section 8

#### **Environmental precautions**

See section 12

#### Methods and material for containment and cleaning up

| Minor Spills | Environmental hazard - contain spillage.<br>Slippery when spilt. |
|--------------|--|
|--------------|--|

|              | <ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Control personal contact with the substance, by using protective equipment.</li> <li>Contain and absorb spill with sand, earth, inert material or vermiculite.</li> <li>Wipe up.</li> <li>Place in a suitable, labelled container for waste disposal.</li> </ul>   |
|--------------|--|
| Major Spills | <ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>Stop leak if safe to do so.</li> <li>Contain spill with sand, earth or vermiculite.</li> <li>Collect recoverable product into labelled containers for recycling.</li> <li>Environmental hazard - contain spillage.</li> <li>Slippery when spilt.</li> </ul> |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 Handling and storage

| Precautions for safe handling |   |
|-------------------------------|---|
| Safe handling                 | <ul> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Avoid contact with moisture.</li> <li>Avoid contact with incompatible materials.</li> <li>When handling, DO NOT eat, drink or smoke.</li> <li>Keep containers securely sealed when not in use.</li> </ul> |
| Other information             | <ul> <li>Store in original containers.</li> <li>Keep containers securely sealed.</li> <li>Store in a cool, dry, well-ventilated area.</li> <li>Store away from incompatible materials and foodstuff containers.</li> <li>Protect containers against physical damage and check regularly for leaks.</li> <li>Observe manufacturer's storage and handling recommendations contained within this SDS.</li> </ul>   |

## Conditions for safe storage, including any incompatibilities

| Suitable container      | <ul> <li>Polyethylene or polypropylene container.</li> <li>Packing as recommended by manufacturer.</li> <li>Check all containers are clearly labelled and free from leaks.</li> <li>DO NOT use aluminium or galvanised containers</li> </ul> |
|-------------------------|--|
| Storage incompatibility | Avoid strong acids, bases.   |
|                         |  |

## **SECTION 8 Exposure controls / personal protection**

### **Control parameters**

Occupational Exposure Limits (OEL)

## INGREDIENT DATA

| Source                       | Ingredient        | Material name                 | TWA                | STEL               | Peak          | Notes         |
|------------------------------|-------------------|-------------------------------|--------------------|--------------------|---------------|---------------|
| Australia Exposure Standards | ethylene glycol   | Ethylene glycol (particulate) | 10 mg/m3           | Not Available      | Not Available | Not Available |
| Australia Exposure Standards | ethylene glycol   | Ethylene glycol (vapour)      | 20 ppm / 52 mg/m3  | 104 mg/m3 / 40 ppm | Not Available | Not Available |
| Australia Exposure Standards | diethylene glycol | 2,2'-Oxybis[ethanol]          | 23 ppm / 100 mg/m3 | Not Available      | Not Available | Not Available |

Emergency Limits

| Ingredient        | TEEL-1        | TEEL-2  |               | TEEL-3  |
|-------------------|---------------|---------|---------------|---------|
| ethylene glycol   | 30 ppm        | 150 ppm |               | 900 ppm |
| diethylene glycol | 6.9 ppm       | 140 ppm |               | 860 ppm |
|                   |               |         |               |         |
| Ingredient        | Original IDLH |         | Revised IDLH  |         |
| ethylene glycol   | Not Available |         | Not Available |         |
| diethylene glycol | Not Available |         | Not Available |         |
| water             | Not Available |         | Not Available |         |

### Exposure controls

| A                       | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: |
|-------------------------|---|
| Appropriate engineering | Process controls which involve changing the way a job activity of process is done to reduce the lisk.   |
| controls                | Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically  |
|                         | "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a   |
|                         | ventilation system must match the particular process and chemical or contaminant in use.  |
|                         | Employers may need to use multiple types of controls to prevent employee overexposure.  |

| Personal protection     |   |
|-------------------------|---|
| Eye and face protection | <ul> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.</li> </ul>  |
| Skin protection         | See Hand protection below   |
| Hands/feet protection   | <ul> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> <li>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</li> <li>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</li> <li>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</li> </ul> |
| Body protection         | See Other protection below  |
| Other protection        | <ul> <li>Overalls.</li> <li>P.V.C apron.</li> <li>Barrier cream.</li> <li>Skin cleansing cream.</li> <li>Eve wash unit.</li> </ul>  |

### **Respiratory protection**

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

## **SECTION 9** Physical and chemical properties

### Information on basic physical and chemical properties

| Appearance                                      | Green liquid with mild odour; miscible with water. |  |                |
|---|--|--|----------------|
|   |  |  |                |
| Physical state                                  | Liquid   | Relative density (Water = 1)               | 1.07           |
| Odour   | Not Available                                      | Partition coefficient n-octanol<br>/ water | Not Available  |
| Odour threshold                                 | Not Available                                      | Auto-ignition temperature (°C)             | 398            |
| pH (as supplied)                                | 10.2-10.6  | Decomposition temperature                  | Not Available  |
| Melting point / freezing point<br>(°C)          | -37  | Viscosity (cSt)                            | Not Available  |
| Initial boiling point and boiling<br>range (°C) | 106-108  | Molecular weight (g/mol)                   | Not Applicable |
| Flash point (°C)                                | Not Applicable                                     | Taste                                      | Not Available  |
| Evaporation rate                                | Not Available                                      | Explosive properties                       | Not Available  |
| Flammability                                    | Not Applicable                                     | Oxidising properties                       | Not Available  |
| Upper Explosive Limit (%)                       | Not Applicable                                     | Surface Tension (dyn/cm or mN/m)           | Not Available  |
| Lower Explosive Limit (%)                       | Not Applicable                                     | Volatile Component (%vol)                  | 50             |
| Vapour pressure (kPa)                           | <0.01  | Gas group                                  | Not Available  |
| Solubility in water                             | Miscible   | pH as a solution (%)                       | Not Available  |
| Vapour density (Air = 1)                        | 2.1  | VOC g/L                                    | Not Available  |

## **SECTION 10 Stability and reactivity**

| Reactivity                         | See section 7  |
|------------------------------------|--|
| Chemical stability                 | <ul> <li>Unstable in the presence of incompatible materials.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul> |
| Possibility of hazardous reactions | See section 7  |
| Conditions to avoid                | See section 7  |
| Incompatible materials             | See section 7  |

Hazardous decomposition products

See section 5

## **SECTION 11 Toxicological information**

| Information | on | toxicological effects |  |
|-------------|----|-----------------------|--|
| mornation   | ~  |                       |  |

| Ingestion         Accia<br>prod           Skin Contact         Ther<br>a del<br>Oper<br>Entry<br>prior           Eye         Ther<br>Mode | dental ingestion of the material may be harmful; anin<br>uce serious damage to the health of the individual.<br>e is some evidence to suggest that the material may<br>ay of some time. Repeated exposure can cause cor<br>n cuts, abraded or irritated skin should not be expos-<br>v into the blood-stream, through, for example, cuts, a<br>to the use of the material and ensure that any exter<br>e is some evidence that material may produce eye in | nal experiments indicate that ingestion of less than 150 gram may be fatal or may<br>r cause mild but significant inflammation of the skin either following direct contact or after<br>ntact dermatitis which is characterised by redness, swelling and blistering.<br>ed to this material<br>abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin<br>nal damage is suitably protected |
|---|--|--|
| Skin Contact Skin Contact Ther a del Oper Entry prior Eye Ther Mode   | e is some evidence to suggest that the material may<br>ay of some time. Repeated exposure can cause cor<br>n cuts, abraded or irritated skin should not be expose<br>v into the blood-stream, through, for example, cuts, a<br>to the use of the material and ensure that any exter<br>e is some evidence that material may produce eye in   | r cause mild but significant inflammation of the skin either following direct contact or after<br>ntact dermatitis which is characterised by redness, swelling and blistering.<br>ed to this material<br>abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin<br>nal damage is suitably protected  |
| Eye Ther<br>Mode  | e is some evidence that material may produce eye in  |  |
|   | erate inflammation may be expected with redness; c   | rritation in some persons and produce eye damage 24 hours or more after instillation.<br>onjunctivitis may occur with prolonged exposure.  |
| Chronic Harm  | material can cause serious damage if one is expose<br>uce severe defects.<br>nful: danger of serious damage to health by prolonge  | ed to it for long periods. It can be assumed that it contains a substance which can<br>ed exposure through inhalation, in contact with skin and if swallowed.  |
| TRP ALLCool Coolant TC  | XICITY   | IRRITATION   |
| Premixed  | t Available  | Not Available  |
| то  | XICITY   | IRRITATION   |
| de  | rmal (mouse) LD50: >3500 mg/kg <sup>[1]</sup>  | Eye (rabbit): 100 mg/1h - mild   |
| Or  | al(Rat) LD50; >2000 mg/kg <sup>[2]</sup>   | Eye (rabbit): 12 mg/m3/3D  |
|   |  | Eye (rabbit): 1440mg/6h-moderate   |
| ethylene glycol   |  | Eye (rabbit): 500 mg/24h - mild  |
|   |  | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|   |  | Skin (rabbit): 555 mg(open)-mild   |
|   |  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup>   |
| тс  | XICITY   | IRRITATION   |
| De  | rmal (rabbit) LD50: 11890 mg/kg <sup>[2]</sup>   | Eye (rabbit) 50 mg mild  |
| Int   | alation(Rat) LC50; >4.6 mg/l4h <sup>[1]</sup>  | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
| diethylene glycol   | al(Mouse) LD50; 2300 mg/kg <sup>[2]</sup>  | Skin (human): 112 mg/3d-l mild   |
|   |  | Skin (rabbit): 500 mg mild   |
|   |  | Skin: no adverse effect observed (not irritating) <sup>[1]</sup>   |
| тс  | XICITY   | IRRITATION   |
| water   | al(Rat) LD50; >90000 mg/kg <sup>[2]</sup>  | Not Available  |
| Legend: 1. Va   | alue obtained from Europe ECHA Registered Substa<br>ified data extracted from RTECS - Register of Toxic  | nces - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise<br>Effect of chemical Substances  |

| ETHYLENE GLYCOL                      | Lestimated Lethal Dose (human) 100 mi; RTECS quoted by Oricaj Substance is reproductive effector in rats (birth defects). Mutagenic to rat cells.<br>For ethylene glycol:<br>Ethylene glycol is quickly and extensively absorbed throughout the gastrointestinal tract. Limited information suggests that it is also absorbed<br>through the airways; absorption through skin is apparently slow. Following absorption, it is distributed throughout the body. In humans, it is initially<br>metabolized by alcohol dehydrogenase to form glycoaldehyde, which is rapidly converted to glycolic acid and glyoxal. These breakdown products<br>are oxidized to glyoxylate, which may be further metabolized to formic acid, oxalic acid, and glycine. Breakdown of both glycine and formic acid<br>can generate carbon dioxide, which is one of the major elimination products of ethylene glycol. In addition to exhaled carbon dioxide, ethylene<br>glycol is eliminated in the urine as both the parent compound and glycolic acid. |                          |   |  |  |
|--------------------------------------|---|--------------------------|---|--|--|
| DIETHYLENE GLYCOL                    | The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.<br>Diglycolic acid is formed following the oxidation of accidentally ingested diethylene glycol in the body and can lead to severe complications with fatal outcome.   |                          |   |  |  |
| WATER                                | No significant acute toxicological data identified in literature search.  |                          |   |  |  |
|                                      |   |                          |   |  |  |
| Acute Toxicity                       | ✓   | Carcinogenicity          | × |  |  |
| Skin Irritation/Corrosion            | ×   | Reproductivity           | × |  |  |
| Serious Eye Damage/Irritation        | ×   | STOT - Single Exposure   | × |  |  |
| Respiratory or Skin<br>sensitisation | ×   | STOT - Repeated Exposure | * |  |  |
| Mutagenicity                         | ×   | Aspiration Hazard        | × |  |  |

Legena:

🗶 – Data either not available or does not till the criteria for classification

Data available to make classification

## SECTION 12 Ecological information

|  | Endpoint         | Test Duration (hr) | Species                       |                | Value            | Source           |
|--|------------------|--------------------|-------------------------------|----------------|------------------|------------------|
| TRP ALLCool Coolant<br>Premixed Not<br>Available | Not<br>Available | Not Available      | Not Available                 |                | Not<br>Available | Not<br>Available |
|  | Endpoint         | Test Duration (hr) | Species                       | Val            | ue               | Source           |
|  | EC50             | 48h                | Crustacea                     | >10            | 0mg/l            | 2                |
| ethylene glycol                                  | LC50             | 96h                | Fish                          | >10            | 1000mg/l         | 1                |
|  | EC50(ECx)        | Not Available      | Algae or other aquatic plants | 650            | 0-7500mg/l       | 1                |
|  | EC50             | 96h                | Algae or other aquatic plants | 6500-13000mg/l |                  | 1                |
|  | Endpoint         | Test Duration (hr) | Species                       | Val            | ue               | Source           |
| diethylene glycol                                | LC50             | 96h                | Fish                          | >10            | 0mg/l            | 4                |
|  | EC50             | 48h                | Crustacea                     | 840            | 00mg/l           | 1                |
|  | NOEC(ECx)        | 192h               | Algae or other aquatic plants | 800            | img/l            | 1                |
|  | EC50             | 96h                | Algae or other aquatic plants | 650            | 0-13000mg/l      | 2                |
|  | Endpoint         | Test Duration (hr) | Species                       |                | Value            | Source           |
| water  | Not<br>Available | Not Available      | Not Available                 |                | Not<br>Available | Not<br>Available |

· · · · ·

Toxic to aquatic organisms.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

May cause long-term adverse effects in the aquatic environment.

**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

| Ingredient        | Persistence: Water/Soil   | Persistence: Air            |
|-------------------|---------------------------|-----------------------------|
| ethylene glycol   | LOW (Half-life = 24 days) | LOW (Half-life = 3.46 days) |
| diethylene glycol | LOW                       | LOW                         |
| water             | LOW                       | LOW                         |

### **Bioaccumulative potential**

| Ingredient        | Bioaccumulation |
|-------------------|-----------------|
| ethylene glycol   | LOW (BCF = 200) |
| diethylene glycol | LOW (BCF = 180) |

### Mobility in soil

| Ingredient        | Mobility       |
|-------------------|----------------|
| ethylene glycol   | HIGH (KOC = 1) |
| diethylene glycol | HIGH (KOC = 1) |

## **SECTION 13 Disposal considerations**

| Waste treatment methods      |   |
|------------------------------|---|
| Product / Packaging disposal | <ul> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li>Otherwise:</li> <li>If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.</li> <li>Where possible retain label warnings and SDS and observe all notices pertaining to the product.</li> <li>Recycle wherever possible or consult manufacturer for recycling options.</li> <li>Consult State Land Waste Authority for disposal.</li> <li>Bury or incinerate residue at an approved site.</li> <li>Recycle containers if possible, or dispose of in an authorised landfill.</li> </ul> |

## **SECTION 14 Transport information**

| Easolo itoquiloa |
|------------------|
|------------------|

| Labels Required  |     |
|------------------|-----|
|                  |     |
| Marine Pollutant |     |
| HAZCHEM          | •3Z |

## Land transport (ADG)

| UN number                    | 082   |  |  |
|------------------------------|---|--|--|
| UN proper shipping name      | NVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ethylene glycol) |  |  |
| Transport hazard class(es)   | Class     9       Subrisk     Not Applicable                                  |  |  |
| Packing group                | III   |  |  |
| Environmental hazard         | Environmentally hazardous   |  |  |
| Special precautions for user | Special provisions274 331 335 375 AU01Limited quantity5 L                     |  |  |

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

(a) packagings;

(b) IBCs; or

(c) any other receptacle not exceeding 500 kg(L). - Australian Special Provisions (SP AU01) - ADG Code 7th Ed.

## Air transport (ICAO-IATA / DGR)

|                              | •   |  |  |  |
|------------------------------|---|--|--|--|
| UN number                    | 3082  | 3082   |  |  |
| UN proper shipping name      | Environmentally hazardo   | Environmentally hazardous substance, liquid, n.o.s. * (contains ethylene glycol) |  |  |
| Transport hazard class(es)   | ICAO/IATA Class<br>ICAO / IATA Subrisk<br>ERG Code  | ICAO/IATA Class9ICAO / IATA SubriskNot ApplicableERG Code9L                      |  |  |
| Packing group                | Ш   | 11   |  |  |
| Environmental hazard         | Environmentally hazardous   |  |  |  |
| Special precautions for user | Special provisions         Cargo Only Packing Instructions         Cargo Only Maximum Qty / Pack         Passenger and Cargo Packing Instructions         Passenger and Cargo Maximum Qty / Pack         Passenger and Cargo Limited Quantity Packing Instructions         Passenger and Cargo Limited Maximum Qty / Pack |  | A97 A158 A197 A215<br>964<br>450 L<br>964<br>450 L<br>450 L<br>Y964<br>30 kg G |  |

### Sea transport (IMDG-Code / GGVSee)

| UN number                    | 3082   |  |  |
|------------------------------|--|--|--|
| UN proper shipping name      | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains ethylene glycol) |  |  |
| Transport hazard class(es)   | IMDG Class<br>IMDG Subrisk   | 9<br>Not Applicable                              |  |
| Packing group                | ш  |  |  |
| Environmental hazard         | Marine Pollutant   |  |  |
| Special precautions for user | EMS Number<br>Special provisions<br>Limited Quantities                         | F-A, S-F       3     274 335 969       3     5 L |  |

Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name      | Group         |
|-------------------|---------------|
| ethylene glycol   | Not Available |
| diethylene glycol | Not Available |
| water             | Not Available |
|                   |               |

## Transport in bulk in accordance with the ICG Code

| Product name      | Ship Type     |
|-------------------|---------------|
| ethylene glycol   | Not Available |
| diethylene glycol | Not Available |
| water             | Not Available |

Schedule 6

Schedule 6

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -

Australian Inventory of Industrial Chemicals (AIIC)

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

## **SECTION 15 Regulatory information**

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

### ethylene glycol is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5

### diethylene glycol is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5

## water is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

## National Inventory Status

| National Inventory                                 | Status  |  |  |
|--|---|--|--|
| Australia - AIIC / Australia<br>Non-Industrial Use | Yes   |  |  |
| Canada - DSL                                       | Yes   |  |  |
| Canada - NDSL                                      | No (ethylene glycol; diethylene glycol; water)  |  |  |
| China - IECSC                                      | Yes   |  |  |
| Europe - EINEC / ELINCS / NLP                      | Yes   |  |  |
| Japan - ENCS                                       | Yes   |  |  |
| Korea - KECI                                       | Yes   |  |  |
| New Zealand - NZIoC                                | Yes   |  |  |
| Philippines - PICCS                                | Yes   |  |  |
| USA - TSCA   | Yes   |  |  |
| Taiwan - TCSI                                      | Yes   |  |  |
| Mexico - INSQ                                      | Yes   |  |  |
| Vietnam - NCI                                      | Yes   |  |  |
| Russia - FBEPH                                     | Yes   |  |  |
| Legend:  | Yes = All CAS declared ingredients are on the inventory<br>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |  |  |

## **SECTION 16 Other information**

| Revision Date | 31/08/2021 |
|---------------|------------|
| Initial Date  | 25/02/2016 |

### **SDS Version Summary**

| Version | Date of Update | Sections Updated  |
|---------|----------------|---|
| 6.1.1.1 | 07/03/2020     | Classification change due to full database hazard calculation/update. |
| 6.1.2.1 | 27/04/2021     | Regulation Change   |
| 6.1.3.1 | 04/05/2021     | Regulation Change   |
| 6.1.4.1 | 07/05/2021     | Regulation Change   |
| 6.1.5.1 | 11/05/2021     | Regulation Change   |
| 6.1.5.2 | 30/05/2021     | Template Change   |
| 6.1.5.3 | 04/06/2021     | Template Change   |
| 6.1.5.4 | 05/06/2021     | Template Change   |
| 6.1.6.4 | 08/06/2021     | Regulation Change   |
| 6.1.6.5 | 09/06/2021     | Template Change   |

| Version   | Date of Update | Sections Updated                                    |
|-----------|----------------|---|
| 6.1.6.6   | 11/06/2021     | Template Change                                     |
| 6.1.6.7   | 15/06/2021     | Template Change                                     |
| 6.1.7.7   | 18/06/2021     | Regulation Change                                   |
| 6.1.8.7   | 22/06/2021     | Regulation Change                                   |
| 6.1.8.8   | 05/07/2021     | Template Change                                     |
| 6.1.9.8   | 14/07/2021     | Regulation Change                                   |
| 6.1.10.8  | 20/07/2021     | Regulation Change                                   |
| 6.1.10.9  | 01/08/2021     | Template Change                                     |
| 6.1.11.9  | 03/08/2021     | Regulation Change                                   |
| 6.1.12.9  | 05/08/2021     | Regulation Change                                   |
| 6.1.13.9  | 10/08/2021     | Regulation Change                                   |
| 6.1.14.9  | 24/08/2021     | Regulation Change                                   |
| 6.1.15.9  | 27/08/2021     | Regulation Change                                   |
| 6.1.15.10 | 29/08/2021     | Template Change                                     |
| 6.1.16.10 | 31/08/2021     | Regulation Change                                   |
| 7.1.16.10 | 31/08/2021     | Chronic Health, Classification, Physical Properties |

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

#### Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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