



HYTREAT 5300

Scale and corrosion inhibitor for recirculating cooling water system

Section 1 : Chemical Product and Company Identification

Product/Chemical Name : HYTREAT 5300
Chemical Formula : Cooling Water Treatment – Scale and Corrosion Inhibitor
Supplier : Hydrocure Pte Ltd
 2 Bukit Batok St 24 , #09-17 Skytech
 Singapore 659480
Tel /Fax : +65 6565 7510 / 65 6567 3508

Last Revised Date : 01.11.2024
Next Revised Date: 01.11.2029

Section 2 : Hazards Identification

GHS Classification:

| Health | Environmental | Physical |
|---|--|----------|
| Skin corrosion/irritation Category 1 Serious eye damage/eye irritation Category 1 Respiratory sensitizer Category 1 Gem cell mutagenicity Category 2 Reproductive toxicity Category 2 | Hazardous to the aquatic environment, acute hazard Category 2 Hazardous to the aquatic environment, long-term hazard Category 2 | NA |

GHS Label: Pictograms



Signal word: DANGER

| Hazard Statements | Precautionary Statements |
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| Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing | Wear protective gloves/eye protection/face protection Do not breathe mist / vapor. Wash thoroughly after handling. |

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| difficulties if inhaled. Toxic to aquatic life with long lasting effects. | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF ON SKIN: Remove all contaminated clothings. Wash with plenty of soap and water. IF IN EYES: Flush eyes with a large amount of water for 15 minutes. Remove contact lens if present. Seek medical attention IMMEDIATELY. Store lockup. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Avoid release into environment. Dispose of contents/container to an approved licensed contractor. |
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Section 3 : Composition/ Information on Ingredients

| Ingredient Name | CAS Number | Concentration % wt |
|--|------------|--------------------|
| 2-phosphonobutane-1,2,4-tricarboxylic acid | 37971-36-1 | < 3 |
| Sodium tolyltriazole | 29385-43-1 | < 2 |
| Terpolymer | 55719-33-0 | <5 |
| Polyacrylic acid | 9003-01-4 | < 5 |
| Zinc Chloride | 7646-85-7 | < 2 |
| Hydrochloride acid | 7647-01-0 | < 5 |
| Other Non-Hazardous Ingredients | Not listed | To 100 |

Section 4 : First Aid Measures

- Inhalation** : Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if any difficulties persist.
- Eye Contact** : Flush eyes with a large amount of water for 15 minutes. Remove contact lens if present and easy to do. Seek medical attention immediately if any irritation persists. After first aid, get appropriate in-plant, paramedic or community medical support.
- Skin Contact** : Take off contaminated clothing. Wash affected areas thoroughly with soap and water for at least 15 minutes. Seek medical attention if any irritation persists. For minor skin contact, avoid spreading material on unaffected skin.
- Ingestion** : Rinse mouth thoroughly. DO NOT induce vomiting. After first aid, seek appropriate in plant, paramedic or physician. Never give anything by mouth to an unconscious person.

Section 5 : Fire-Fighting Measures

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| Flash Point | : Non-Flammable |
| Auto-ignition Temperature | : N/A |
| Flammability Classification | : Non flammable |
| Extinguishing Media | : Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂), sand, earth, water spray and foam. |
| Extinguishing media to avoid | : NA |
| Fire hazards during firefighting | : NA |

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| Fire-Fighting Procedure | : Cool containers exposed to flames with water until well after the fire is out. In the event of fire, cool tanks with water spray. Water runoff can cause environmental damage. |
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Section 6 : Accidental Release Measures

Spill/Leak Procedures

Small Spills : Absorb spill with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Material should be prevented from contaminating soil or from entering sewage and drainage.

Large Spills

Containment : For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways. Absorb spill with vermiculite, oil dry or similar non-reactant absorbent.

Cleanup

: Accumulate the absorbed materials and dispose of according to federal, state and local regulations. Never return spills in original containers for re-use.

Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120)

Section 7 : Handling and Storage

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| Handling Precautions | : Use the recommended safety controls and personal protective equipment as outlined. Fully review all data before handling of the material itself. Avoid contact with skin or eyes. Avoid breathing dust or mist. Keep from contact with clothing and other combustible materials. Observe good personal hygiene and housekeeping practices. Do not empty into drains. |
| Storage Requirements : | Store locked up. Store in corrosive resistant container with a resistant inner liner. Keep container tightly closed. Keep out of the reach of children. |
| Regulatory Requirements | : Store materials according to all local, state and federal guidelines that are established for non-regulated chemical products. |

Section 8 : Exposure Controls/Personal Protection

Engineering Controls

Ventilation : Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls

Respiratory Protection : Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written

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| | respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas. |
| Protective Clothing/Equipment | : Wear chemically resistant protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses. |
| Safety Stations | : Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. |
| Contaminated Equipment | : Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. |
| Comments | : Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. |

Section 9 : Physical and Chemical Properties

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| Physical State | : Liquid |
| Appearance | : Clear colorless to light pale yellow |
| Odor | : Mild |
| Specific Gravity | : 1.10 – 1.16 |
| PH | : 1.0 – 1.20 |
| Freezing Point | : 0 °C / 32°F |
| Boiling Point | : 100°C / 212 °F |
| Solubility | : Complete in water |

Section 10 : Stability and Reactivity

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| Stability | : This product is stable at room temperature in closed containers under normal storage and handling conditions. |
| Polymerization | : Hazardous polymerization will not occur. |
| Chemical Incompatibilities | : Incompatible with bases. This product may react with reducing agents. |
| Conditions to Avoid | : Reacts violently with strong alkaline substances. This product may react With reducing agents. Do not mix with other chemicals. |
| Hazardous Decomposition Products | : Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid). Toxic gas. |

Section 11 : Toxicology Information

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| Eye Effects | : Cause severe eye burns and damage. Permanent eye damage including blindness |
| Chronic Effects | : May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Mutagenicity | : Suspected of causing genetic defects |
| Acute Oral Effects | : Not tested for this blend |
| Skin Effects | : Causes severe skin Burns and corrosion. Harmful when in contact. |
| Teratogenicity | : No studies have been performed |
| Specific target organ toxicity - single exposure | : Causes damage to organs (Liver, pancreas, Respiratory system) |

Specific target organ toxicity following repeated exposure : Liver. Lungs. Respiratory system. Teeth.

Section 12 : Ecological Information

Eco-toxicity : Very toxic to aquatic life. Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the environment. Because of the low pH of this product, it would be expected to produce significant Ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Environmental Fate : No studies have been conducted for this specific product.

Environmental Degradation : Not tested for this product blend.

Soil Absorption/Mobility : Not tested for this product blend.

Section 13 : Disposal Considerations

Disposal : Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state and local regulations.

Disposal Regulatory Requirements

Container Cleaning and Disposal: This material and its container must be disposed of as hazardous waste. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities

Section 14 : Transport Information

Land Transport (ADR):

UN number UN3264
Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Hazard class 8
Packing group II

Air Transport (IATA):

UN number UN3264
Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.
Hazard class 8
Packing group II

Marine Transport (IMDG/IMO):

UN number UN3264
Proper shipping name CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
Hazard class 8
Packing group II
EmS F-A, S-B



ADR; IATA; IMDG

Section 15 : Regulatory Information

State Regulations: As a product blend, the materials are generally not listed. Check with your local state regulatory board for more detailed information regarding the specific components of this product.

Section 16 : Other Information

Disclaimer:

USERS RESPONSIBILITY

The information and recommendations contained herein cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers. It is your responsibility to use this information to develop appropriate work practice guidelines and employee instructional programs for your operation.

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