

SAFETY DATA SHEET

HA21

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1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: HA21

Use / description of product: Cooling system corrosion inhibitor. Liquid. Corrosive. The regulatory information is dependent upon the concentration limit of the specific substance.

Company name: Howlett Associates Water Treatment Ltd

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2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients: ZINC CHLORIDE <10%

CAS: 7646-85-7

EINECS: 231-592-0

[C] R34; [N] R50/53;

- MALEIC ACID COPOLYMER <10%

CAS: 113221-69-5

EINECS: Exempt

[Xi] R36;

Contains: A blend of corrosion inhibitors.

3. HAZARDS IDENTIFICATION

Main hazards: Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES (SYMPTOMS)

Skin contact: Irritation or pain may occur at the site of contact. Blistering may occur. Severe burns may occur.

Eye contact: There may be irritation and redness. The eyes may water profusely. Corneal burns may occur.

Ingestion: There may be soreness and redness of the mouth and throat. There may be difficulty swallowing. Corrosive burns may appear around the lips. Nausea and stomach pain may occur. There may be vomiting.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may cause coughing or wheezing. There may be congestion of the lungs causing severe shortness of breath. There may be loss of consciousness.

4. FIRST AID MEASURES (ACTION)

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

[cont...]

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Do not induce vomiting. If substance swallowed is corrosive, give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Carbon dioxide. Alcohol or polymer foam. Dry chemical powder.

Exposure hazards: Corrosive. In combustion emits toxic fumes.

Protection of fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised personnel.

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

Clean-up procedures: Transfer to a suitable container. Wash down the drain with large amounts of water.

7. HANDLING AND STORAGE

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients: ZINC CHLORIDE

TWA (8 hr exposure limit): 1 mg/m³ STEL (15 min exposure limit): 2 mg/m³

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

Eye protection: Safety goggles. Face-shield. Ensure eye bath is to hand.

Skin protection: Protective clothing with elasticated cuffs and closed neck. Boots made of PVC. PVC apron covering the tops of the boots. Ensure safety shower is to hand.

9. PHYSICAL AND CHEMICAL PROPERTIES

State: Liquid

Colour: Brown

Odour: Perceptible odour

Solubility in water: Soluble

Viscosity: Non-viscous

Relative density: 1.050 - 1.065

pH: 1-2

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Materials to avoid: Bases.

11. TOXICOLOGICAL INFORMATION

Ingredients: ZINC CHLORIDE
IVN RAT LD50 3690 µg/kg
ORL MUS LD50 329 mg/kg
ORL RAT LD50 350 mg/kg

- MALEIC ACID COPOLYMER
Eyes Irritant
ORL RAT LD50 3874 mg/kg

12. ECOLOGICAL INFORMATION

Ingredients: MALEIC ACID COPOLYMER
Acute ALGAE 72H IC50 380 mg/l
Acute FISH 96H LC50 >1000 mg/l
COD 1114 mgO₂/g

Mobility: Soluble in water.

Other adverse effects: Do not allow concentrated product to enter rivers or water courses.

13. DISPOSAL CONSIDERATIONS

Disposal operations: Disposal should be carried out by licenced contractors.

Disposal of packaging: Containers must be disposed of in a safe way.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

14. TRANSPORT INFORMATION

ADR / RID

IMDG / IMO

IATA / ICAO

15. REGULATORY INFORMATION

Hazard symbols: Irritant.

Dangerous for the environment.



Risk phrases: R36/38: Irritating to eyes and skin.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

[cont...]

Safety phrases: S2: Keep out of the reach of children.
S24/25: Avoid contact with skin and eyes.
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S29/56: Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. ADDITIONAL INFORMATION

Risk phrases used in s.2: R34: Causes burns.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R36: Irritating to eyes.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.