

Material Safety Data Sheet

1. Product and Company Identification

Product Name: AP5 Antimicrobial Preservative
Trade Name: AP5
Revision Date: 10/02/2006
Company Name: Chemisys Ltd

Address: P. O. Box 40480
Glenfield
Auckland
New Zealand
Phone 09 4768603 Fax 09 4768605

Hazardous according to the criteria of Worksafe Australia

2. Composition/Information on Ingredients

Ingredients considered hazardous according to the criteria of Worksafe Australia:

| Chemical Name | CAS # | Proportion |
|----------------------------------|---------------|-------------------|
| Aryl Sulphonic Acid | [Proprietary] | 30-<60% |
| 1,2 Ethanediol (Ethylene Glycol) | [107-21-1] | 10-<30% |
| Copper-8-Hydroxyquinoline | [10380-28-6] | <10% |
| Phosphoric Acid | [7664-38-2] | <10% |

Ingredients determined not to be hazardous to 100%

3. Hazards Identification

Swallowed: Causes gastrointestinal irritation, nausea, vomiting and diarrhoea.
Eye: Corrosive. Causes irreversible damage.
Skin: Causes skin burns on repeated or prolonged contact.
Inhaled: Causes drowsiness, nausea and vomiting.
Environment: Toxic to marine organisms.
Chronic Effects: Increased risk with Wilson's disease. Toxicity caused by accumulation of copper in sensitive individuals.

4. First Aid Measures

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids apart to ensure flushing of the entire eye surface. Seek medical attention as soon as possible.

Ingestion:

DO NOT induce vomiting. If vomiting occurs spontaneously, keep airway clear. Seek medical attention IMMEDIATELY. NEVER induce vomiting or give anything by mouth to an unconscious patient.

Inhalation:

Remove victim to fresh air. Persons administering first aid to overexposure victims should carefully wash off any visible product from the victims face. Do not give anything by mouth to an unconscious person. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult administer oxygen. Get medical attention IMMEDIATELY.

Skin:

Wash with plenty of soap and water. Remove contaminated clothing and footwear. Wash clothing and contaminated footwear before reuse. Seek medical attention if irritation persists.

5. Fire-Fighting Measures

Flammability: Non flammable

Unusual Fire and Explosion Hazards: None known

Special Protective Equipment: Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus. Avoid all skin and eye contact.

Combustion Products: Toxic fumes may be evolved on exposure to heat. (See Section 10 of this MSDS)

6. Accidental Release Measures

Hazards:

This product is toxic to fish. DO NOT contaminate waterways.

Steps to be taken if material is released or spilled:

Wear appropriate protective clothing. Eliminate all ignition sources. Restrict access to contaminated area. Stop spill at source. Dike to prevent spreading. Collect free liquid into a recovery vessel. Absorb remainder with sand or clay and place in a properly labelled waste receptacle. Follow all government and local body regulations for disposal. Do not contaminate water while cleaning equipment or disposing of wastes. Prohibit contamination of streams, lakes and other bodies of water.

Container Disposal:

DO NOT reuse container. Dispose of safely.

7. Handling and Storage

Handling:

Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practises. Wash hands thoroughly after contact.

Storage:

Store in a cool, dry place out of reach of children.
Incompatible with metallic iron or zinc.
Keep away from direct sunlight and rain.

8. Exposure Controls/Personal Protection

Ventilation Requirements:

Ventilate via mechanical methods (general or local exhaust) to maintain exposure below 5mg/m³. Good industrial hygiene practise dictates that indoor work areas should be isolated and provided with adequate local exhaust ventilation.

Respiratory Protection:

None normally required if good ventilation is maintained. If mist is generated during application process, use a disposable mist respirator.

Eye Protection:

If accidental eye contact is possible then wear goggles or a face visor.

Skin Protection:

Unnecessary skin contact should be avoided and good personal hygiene practises observed. If skin contact is anticipated then protective clothing including impervious PVC or Nitrile gloves should be worn.

9. Physical and Chemical Properties

| | |
|-----------------------------|---------------------------|
| Appearance: | Clear green/brown liquid. |
| Boiling Point: | 100 degrees Celsius. |
| PH Range: | ~2.0 |
| Specific Gravity: | 1.06 @ 20 degrees Celsius |
| Solubility in Water: | Miscible |
| Flash Point: | N/A |

10. Stability and Reactivity

| | |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Stability: | Products of this type are stable and unlikely to react in a hazardous manner under normal conditions. Avoid contact with metallic iron and zinc. |
| Incompatibility: | Strong oxidising agents or alkalis |
| Hazardous Decomposition Products: | Oxides of carbon, nitrogen and sulphur. |
| Hazardous Polymerisation: | Will not occur |

9. Toxicological Data

Eyes:

Can cause severe irritation, redness, tearing, and blurred vision. Can cause irreversible damage on prolonged contact.

Ingestion:

| | | | |
|----------------------------------|--------------|------------------|------------|
| 1,2 Ethanediol (Ethylene Glycol) | [107-21-1] | Oral-mouse LD50: | 10000mg/kg |
| Copper-8-Hydroxyquinoline | [10380-28-6] | Oral-rat LD50: | 4700mg/kg |

Can cause gastro-intestinal irritation, nausea, vomiting, and diarrhoea.

Inhalation:

At normal ambient temperatures this product will be unlikely to present an inhalation hazard because of its low volatility. Can cause nasal and respiratory irritation, dizziness, nausea, vomiting, headache, and weakness.

Skin:

Prolonged or repeated contact may result in itching, defatting, dermatitis or more serious irreversible skin disorders.

12. Ecological Information

Hazard:

This product is toxic to marine organisms.

13. Disposal Considerations

Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations.

Incineration may be carried out under controlled conditions provided that local regulations for emissions are met.

Dispose of product and container responsibly and carefully.

Do not dispose of near waterways, down drains or into soil.

14. Transport Information

Road Transport: Aryl Sulphonic Acid
UN 2586
Hazchem 2X
DG Class 8, No subsidiary risk.
Packaging Group III

Sea Transport: IMDG page 8105 (amendment 27-94)

15. Regulatory Information

New Zealand Classifications:

UN Number: 2586
HAZCHEM Code: 2X
Dangerous Goods Class 8
Packaging Group: III

16. Other Information

Compiled by:

Chemisys Ltd

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New Zealand

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date specified. However no warranty or representation, expressed or implied is made as to the accuracy or completeness of the data and the information in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the users obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Chemisys Group shall not be responsible for any damage of injury resulting from abnormal use of this material, from any failure to adhere to recommendations or from any hazards inherent in the nature of the material.