

SAFETY DATA SHEET

BIOSUB

Infosafe No.: MTHMZ
ISSUED Date: 14/08/2017
Issued by: Hydro-Chem Pty Ltd

1. IDENTIFICATION

GHS Product Identifier

BIOSUB

Product Type

WATER TREATMENT BIOCIDES

Company Name

Hydro-Chem Pty Ltd

Address

23B Industrial Drive Braeside
VIC 3195

Telephone/Fax Number

Tel: (03) 9553 1011

Emergency phone number

1300 558 788

Emergency Contact Name

Tony Ventura

Recommended use of the chemical and restrictions on use

Biosub should be placed in the basin of the coolers. When the container floats, this indicates that the Biosub is depleted. Contact point of purchase for advise on alternatives applications.

Additional Information

Product Description: Biosub aids in the control of bacterial, fungal and algal slimes in open recirculating cooling water systems. Biosub is suitable for industrial or domestic evaporative coolers only.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Acute Toxicity - Inhalation: Category 4

Acute Toxicity - Oral: Category 4

Corrosive to Metals: Category 1

Eye Damage/Irritation: Category 1

Oxidizing Solids: Category 3

Skin Corrosion/Irritation: Category 1

Signal Word (s)

DANGER

Hazard Statement (s)

H272 May intensify fire; oxidiser.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

Pictogram (s)

Exclamation mark, Corrosion, Flame over circle



Precautionary statement – Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P220 Keep/Store away from clothing/combustible materials.

P221 Take any precaution to avoid mixing with combustibles

P234 Keep only in original container.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash contaminated skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use CO2, Dry Chemical or foam for extinction.

P390 Absorb spillage to prevent material damage.

Precautionary statement – Storage

P405 Store locked up.

P406 Store in corrosive resistant/ container with a resistant inner liner.

Precautionary statement – Disposal

P501 Dispose of contents/container to / in accordance with local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Information on Composition

All ingredients in this product are listed on the Australian Inventory of Chemical Substances (AICS).

Ingredients

Name	CAS	Proportion
1-bromo-3-chloro-5,5-dimethylhydantoin	16079-88-2	60-100 %
Inert Ingredients		TO 100%

4. FIRST-AID MEASURES

Inhalation

Remove victim to fresh air.

If irritation persists, contact physician. Never give anything by mouth to and unconscious person.

Ingestion

Feed gruel, cooked cereal or bread soaked in milk followed by olive oil.

Immediately contact physician.

Never give anything by mouth to an unconscious person.

Skin

Wash with plenty of soap and water.

Seek immediate medical advice.

Eye contact

Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open.

Seek immediate medical assistance.

5. FIRE-FIGHTING MEASURES

Fire Fighting Measures

Extinguishing Media: Use carbon dioxide (CO₂), dry chemical or foam.

Specific Hazards Arising From The Chemical

Hazardous decomposition products of heating and/or burning:

Hydrogen chloride.

Oxides of nitrogen

Hydrogen bromide

Bromide gas

Extinguish fire with the following:

Use carbon dioxide.

Use CO₂, dry chemical or foam.

Keep containers cool with water spray.

DO NOT BREATHE FUMES

Contain run-off.

Oxidizing material. Forms explosive mixtures with combustible, organic or other easily oxidizable materials.

Hazchem Code

1Y

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

If product from containers is released: To avoid material coming in contact with skin and eyes during clean-up operations. Wear appropriate personal protective equipment (PPE) such as nitrile rubber gloves and safety glasses. Contain - prevent contamination of drains and waterways. Sweep up or collect, but avoid generating dust. Use spark free implements. Re-collect in original container if possible. Normally suitable for disposal at an approved land/recycling waste site.

Spills & Disposal

If product from containers is released:

Contain - prevent contamination of drains and waterways. Sweep up or collect, but avoid generating dust. Use spark free implements. Re-collect in original container if possible. Normally suitable for disposal at an approved land waste site.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Do not open containers, avoid release of chemical.
Always wear gloves when handling this product refer to Section 8.
If chemical is released refer to Section 6.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values

No data supplied.
TLV not established

Appropriate Engineering Controls

Use with adequate ventilation.
Avoid generating and inhaling dusts.

Personal Protective Equipment

Wearing of the following personal protective equipment is recommended.
Safety glasses, goggles or faceshield as appropriate.
Rubber gloves.
Avoid inhaling the vapour, mist or dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Solid

Appearance

White to off-white tablets.
Faint halogen odour.

Melting Point

Not applicable - Decomposes

Boiling Point

Not Allocated

Specific Gravity

1.8-2.0 (water = 1)

Vapour Pressure

Negligible

Flash Point

Not Allocated

Flammability

Keep away from heat, sparks or naked flames.
OXIDIZING material. Forms explosive mixtures with combustible, organic or other easily combustible materials.

Flammable Limits - Lower

Not Allocated

Other Information

Solubility in water.....0.2% @ 25°C/77°F
Solubility in benzene.....2.5% @ 25°C/77°F

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions

STRONG OXIDIZING AGENT !!! Mix only with water. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter, or other chemicals may start a chemical reaction with generation of heat, liberation hazardous gases and possible geration of fire and explosion. In case of contamination or decomposition, do not reseal container. If possible, isolate container in open air or well-ventilated area. Flood with large volumes of water, if necessary.

Hazardous Decomposition Products

Thermal decomposition products may yield the following:

-hydrogen bromide-bromide gas-hydrogen chloride

Hazardous polymerization

Product will not undergo polymerization.

Incompatibility

Aviod contact with the following:

-bases-oxidizing agents-organic chemicals

11. TOXICOLOGICAL INFORMATION

Toxicology Information

Acute Data

Oral LD50 - rat:929 mg/kg

Skin irritation - rabbit: severe irritation, may be corrosive.

Mutagenicity Data

Ames mutagenicity: Negative.

Sensitivity Data

Sensitization - human: Possible skin sensitization.

Ingestion

Moderately toxic.

May cause irritation to mouth, throat and stomach.

May cause damage to the mucous membranes.

Inhalation

Inhalation of dust may result in respiratory irritation.

May cause irritation to the throat and lungs.

May cause -shortness of breath - headache - nausea.

Skin

Contact with skin may result in irritation.

Prolonged or repeated exposure may cause skin sensitization.

Can cause superficial burns after prolonged contact.

Contact with MOIST skin will cuase the following;

-severe skin burns.

Eye

A severe eye irritant.

Permanent eye damage, including loss of sight, may occur.

Chronic Effects

No data supplied.

12. ECOLOGICAL INFORMATION

Environmental Protection

This biocide is toxic to fish. DO NOT discharge into lakes, streams, ponds, public water; unless in accordance with NPDES permit. For guidance, contact your Regional Office of the EPA. DO NOT contaminate water by cleaning of container and equipment or disposal of wastes. Apply this biocide only as specified on this label.

Environmental Toxicity;

Bobwhite quail, Dietary LC50: >5620ppm

Bobwhite quail, Oral LD50: 1839mg/kg

Mallard duck, Dietary LC50: >5620 ppm

Rainbow trout (*Salmo gairdneri*), 96 hour LC50 Static: 0.4mg/l

Bluegill sunfish (*Lepomis macrochirus*), 96 hour LC50 Static: 0.46mg/l

Daphnia magna, 48 hour LC50: 0.75mg/l

All results are based on a nominal concentration of active ingredient.

13. DISPOSAL CONSIDERATIONS

Disposal considerations

Material should be disposed of in accordance with local, state and federal regulations.

Small quantities can be dissolved in water and flushed to sewer with excess water.

Container Disposal

Empty containers can be discarded as general waste.

14. TRANSPORT INFORMATION

U.N. Number

1479

UN proper shipping name

OXIDIZING SOLID, N.O.S.

Transport hazard class(es)

5.1

Packing Group

III

Hazchem Code

1Y

Storage and Transport

Keep containers closed at all times.

Store in a cool, dry place.

Store away from sources of heat or ignition.

IERG Number

31

15. REGULATORY INFORMATION

Poisons Schedule

Not Scheduled

Packaging & Labelling

As required by the ADG Code and the Standard for the Uniform Scheduling of

Drugs and Poisons.

16. OTHER INFORMATION

Contact Person/Point

Normal Working Hours - Ph: (03) 9553 1011 Fax: (03) 9553 1387
Ask for the Facilities Manager, Sales Manager or Services Manager.
After Hours - Ph : 1300 558 788

Further information/advice is available to those persons responsible for the design of safe work practices on their written request to HydroChem.

This SDS summarises to the best of our knowledge at the date of issue, the health and safety hazard information of the selected substance and how to safely handle the selected substance in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products.

Hydro-Chem Pty Ltd responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

If clarification or further information is required, the user should contact Hydro-Chem Pty Ltd using the contact details provided.

Manufacturers Advice

DIRECTIONS FOR USE: It is a violation of Federal law to use this product in a manner inconsistent with its labelling.

User Information

CONTAINERS HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied.

Other Information

ABBREVIATIONS:

- ACGIH - American Conference of Government Industrial Hygienists
- OSHA - Occupational Safety and Health Information
- TLV - Threshold Limit

Hydro-Balance is a range of products developed and manufactured by Hydro-Chem for the preventative maintenance of air conditioning and refrigeration systems.

END OF SDS

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