

BioGuard® Maintain Super Soluble

Version:	1.0
Revision Date:	03/25/2008
Print Date:	12/05/2008

The recipient of this Safety Data Sheet is urged to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet,(2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: BioGuard® Maintain Super Soluble
Product Use Description: Recreational Water Sanitizer
Chemical nature: Chlorinated Isocyanurates
EPA Registration Number: 5185-441

Company: Bio-Lab, Inc.
BioGuard
P.O. Box 300002
Lawrenceville, GA
30049-1002

Emergency telephone: CHEMTREC (US Transportation) :
(800) 424-9300
(703) 527-3887
Poison Control Center (Medical) :
(877) 800-5553

Customer Service: (800) 859-7946

Prepared by: Product Safety Department
(US) +1 866-430-2775
(EU) +44 (0) 1753.603.000
Email: MSDSRequest@chemtura.com

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

DANGER!

Form: granules
Colour: white
Odour: Chlorine

Corrosive
Oxidizer
Causes severe eye damage.
Harmful if absorbed through skin.
May be fatal if inhaled.

OSHA Hazards:
THIS MATERIAL IS HAZARDOUS UNDER THE
CRITERIA OF THE FEDERAL OSHA HAZARD
COMMUNICATION STANDARD 29CFR 1910.1200.

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Causes respiratory tract irritation.
Harmful if swallowed.
Avoid breathing dust or vapor.
Do not get in eyes, on skin, or on clothing.

Potential Health Effects

- Primary Routes of Entry : Eye contact
Skin contact
Inhalation
Ingestion
- Aggravated Medical Condition : Respiratory disorders
Skin disorders
- Inhalation : May be fatal if inhaled.
Causes respiratory tract irritation.
- Skin : Harmful if absorbed through skin.
On contact with moisture, this material readily hydrolyzes to acid which may result in burns if not promptly removed.
- Eyes : Causes severe eye damage.
- Ingestion : Harmful if swallowed.
- Chronic Exposure : None known.

SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Concentration
Sodium dichloro-s-triazinetriene dihydrate	51580-86-0	99 %

SECTION 4. FIRST AID MEASURES

First aid procedures

- Inhalation : Remove to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
Call a physician or poison control centre immediately.
- Skin contact : Remove contaminated clothing and shoes.
Rinse immediately with plenty of water for at least 15 minutes.
Call a physician or poison control centre immediately.

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Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses, if present, after 5 minutes, then continue rinsing eye.
Call a physician or poison control centre immediately.

Ingestion : Call a physician or poison control centre immediately.
Have person sip a glass of water if able to swallow.
Do not induce vomiting unless told to do so by the poison control center or doctor.
Do not give anything by mouth to an unconscious person.

Notes to physician

Treatment : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : not applicable

Protective equipment and precautions for firefighters

Suitable extinguishing media : Flood with large volumes of water.

Unsuitable extinguishing media : ABC powder
Dry chemical
Risk of violent reaction.

Hazardous decomposition products : Chlorine containing gases can be produced.

Further information : This product, if heated by an outside source to temperatures above 240 C (464 F), will undergo vigorous self-sustaining decomposition with the evolution of heat and dense noxious gases.
When ignited, will burn with the evolution of noxious chlorine containing gases.

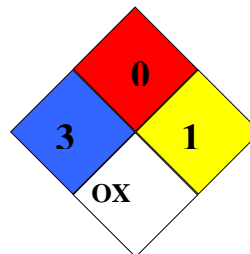
Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

Further information

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NFPA Classification : Health Hazard: 3
Fire Hazard: 0
Reactivity Hazard: 1
Specific hazards: OX Class
1 Oxidizer.



Additional advice : Nitrogen trichloride can be generated slowly by the reaction of small quantities of water with a high concentration of this product. Nitrogen trichloride can present an explosion hazard. Immediately after a fire has been extinguished, check for wet or damp material. Any spilled material from burned or broken containers should be assumed contaminated. Neutralize to a non-oxidizing material for safe disposal. Do not attempt to re-close broken containers, even for movement to the disposal area. They should be left open to disperse any nitrogen trichloride that may form. Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the plastic liner (where applicable) of the container is damaged or the material is damp, the material should be chemically treated if allowable, to a non-oxidizing material for safe disposal. Bulging containers require extreme care. Contact the fire department.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods for containment /
Methods for cleaning up : Using appropriate protective clothing and safety equipment, contain spilled material.
Do not add water to spilled material.
Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry containers for disposal.
Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form.

Additional advice : Do not use floor sweeping compounds to clean up spills.
Do not transport wet or damp material.
Treat recovered material as described in the section "Disposal considerations".

SECTION 7. HANDLING AND STORAGE

Handling

Advice on safe handling : Avoid contact with skin, eyes and clothing.
Avoid breathing dust.
Avoid breathing vapors.
Strong oxidizing agent.
Do not mix with other chemicals.
Mix only with water.
Never add water to this product.
Always add product to large quantities of water.
Use only clean and dry utensils.
Do not add this product to any dispensing devices containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion.

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Contamination with moisture, organic matter or other chemicals may start a chemical reaction and generate heat, hazardous gas, possible 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.
Wash hands thoroughly with soap and water after handling and before eating, drinking or using tobacco.
Do not handle until all safety precautions have been read and understood.

Storage

Requirements for storage areas and containers : Store in original container.
Temperature not to exceed 52 C (125F) for 24 hours.
Keep container closed when not in use.
Store in a cool, dry, well ventilated area away from heat or open flame.
Keep out of reach of children.
Keep away from animals.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures

Engineering measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Use with adequate ventilation.

Personal protective equipment

Eye protection : Goggles
Safety glasses with side-shields

Hand protection : Wear rubber gloves.

Respiratory protection : A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Hygiene measures : Wash contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granules

Colour : white

Odour : Chlorine

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Safety data

Flash point	:	not applicable
pH	:	6 - 7 at 77 °F (25 °C) 1% Solution
Melting point/range	:	464 - 482 °F (240 - 250 °C) Decomposes
Boiling point/boiling range	:	not applicable
Vapour pressure	:	Not Available
Density	:	0.897 - 0.961 g/cm ³
Water solubility	:	280 g/l
Relative vapour density	:	Not Available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	High temperatures. Poor ventilation. Contamination Moisture/high humidity.
Materials to avoid	:	Avoid contact with water on concentrated material in the container. Avoid contact with easily oxidizable material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; other swimming pool/spa chemicals in their concentrated form; alkalis. Avoid contact with all other chemicals.
Hazardous decomposition products	:	Chlorine containing gases can be produced.
Thermal decomposition	:	240 - 250 °C (464 - 482 °F)
Hazardous reactions	:	Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

<u>Acute oral toxicity</u>	:	LD50 rat Dose: 1,823 mg/kg
<u>Acute dermal toxicity</u>	:	LD50 rat Dose: > 5,000 mg/kg

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- Acute inhalation toxicity : This material in the form as sold is not expected to produce respiratory effects. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes.
- Skin irritation : rabbit
Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns.
- Eye irritation : Causes severe eye damage.
- Sensitisation : This product is not expected to be a skin sensitizer.

SECTION 12. ECOLOGICAL INFORMATION

- Additional ecological information : Toxic to fish.
Toxic to aquatic organisms.
Do not discharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Component:

Sodium dichloro-s-triazinetrione dihydrate

51580-86-0

Toxicity to fish:

LC50

Species: Oncorhynchus mykiss (rainbow trout)

Dose: 0.24 mg/l

Exposure time: 96 h

Information given is based on data on the components and the toxicology of similar products.

Toxicity to daphnia and other aquatic invertebrates.:

LC50

Species: Daphnia magna (Water flea)

Dose: 0.199 mg/l

Exposure time: 48 h

Information given is based on data on the components and the toxicology of similar products.

Toxicity to algae:

EC50

Species: Selenastrum capricornutum (green algae)

Dose: 655 mg/l

Exposure time: 96 h

Information given is based on data on the components and the toxicology of similar products.

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SECTION 13. DISPOSAL CONSIDERATIONS

- Further information : Dispose of waste material in compliance with all federal, state, and local regulations.
If these wastes cannot be disposed of by use according to label instructions, contact your Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. For registered pesticides, contact your State Pesticide Agency.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.
Contact with incompatible materials could cause a reaction or fire.
Improper disposal of excess product, spray mixture or rinsate is a violation of Federal Law.
- Contaminated packaging : Do not re-use empty containers.
Rinse thoroughly before discarding in trash.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

Not regulated for transport

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SECTION 15. REGULATORY INFORMATION

National regulatory information

OSHA Hazards : This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SARA Hazard category : Fire Hazard
Reactivity Hazard
Acute Health Hazard

(Product) : Not listed

US State Regulations

US MA RTK : US. The Commonwealth of Massachusetts Department of Public Health; Massachusetts Right-to-know law, The Massachusetts Substance List, 105 CMR 670.000
(Component)

Massachusetts hazardous substance

Sodium dichloro-s-triazinetrione dihydrate	51580-86-0	
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US PA RTK : US. Commonwealth of Pennsylvania - Department of Labor and Industry; Pennsylvania Code Title 34, Labor and Industry Chapter 323
(Component)

hazardous substance

Sodium dichloro-s-triazinetrione dihydrate	51580-86-0	
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The components of this product are reported in the following inventories:
TSCA

Additional advice :

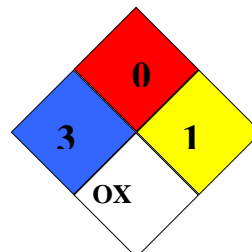
FIFRA (Federal Insecticide, Fungicide, Rodenticide Act): This product is a registered pesticide.

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SECTION 16. OTHER INFORMATION

Further information

NFPA Classification : Health Hazard: 3
Fire Hazard: 0
Reactivity Hazard: 1
Specific hazards: OX Class 1
Oxidizer.



HMIS Classification : Health Hazard: 3
Flammability: 0
Physical and chemical hazards: 1
PPI: Ask supervisor or safety specialist for handling instructions

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of the seller, it is the user's obligation to determine the conditions of safe use of the products.