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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

OSHA Hazards:

Causes severe eye damage. Harmful if absorbed through skin. THIS MATERIAL IS HAZARDOUS UNDER THE CRITERIA OF THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 29CFR 1910.1200.

May be fatal if inhaled.

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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-triazinetrione 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**

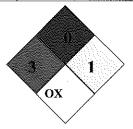
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#### NFPA Classification

: 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

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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/cm3

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

Acute oral toxicity

LD50 rat

Dose: 1,823 mg/kg

Acute dermal toxicity

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

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 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:

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

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 (Component)

US. The Commonwealth of Massachusetts Department of Public Health;

Massachusetts Right-to-know law, The Massachusetts Substance List,

105 CMR 670.000

Massachusetts hazardous substance

Sodium dichloro-striazinetrione dihydrate

51580-86-0

US PA RTK (Component) US. Commonwealth of Pennsylvania - Department of Labor and Industry;

Pennsylvania Code Title 34, Labor and Industry Chapter 323

hazardous substance

Sodium dichloro-s-

triazinetrione dihydrate

51580-86-0

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

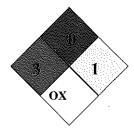
Health Hazard: 3

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.

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