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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® Inhibit Optimizer Plus®

Product Use Description: Recreational Water Product

Chemical nature: Inorganic Borates

EPA Registration Number: 5185-461

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

For additional emergency telephone numbers see section 16 of the

Safety Data Sheet.

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:granulesColour:whiteOdour:odourless

Harmful if swallowed. OSHA Hazards:

Risk of serious damage to eyes.

THIS MATERIAL IS HAZARDOUS UNDER THE
CRITERIA OF THE FEDERAL OSHA HAZARD
May cause skin irritation.

COMMUNICATION STANDARD 29CFR 1910.1200.

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Avoid breathing dust.

Do not get in eyes, on skin, or on clothing.

Potential Health Effects

Primary Routes of Entry : Eye contact

Inhalation Ingestion

Inhalation : Causes respiratory tract irritation.

Skin : May cause skin irritation.

Eyes : Risk of serious damage to eyes.

Ingestion : Harmful if swallowed.

Chronic Exposure : This product contains a boron compound. This boron compound when fed to

test animals at very high doses, has shown reproductive and developmental toxicity. When this product is used according to label directions, the boron compound in this product does not represent a practical risk to man.

SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Component	CAS-No.	Concentration
Sodium tetraborate pentahydrate	12179-04-3	100 %

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation : Remove to fresh air.

Give oxygen or artificial respiration if needed. Call a POISON CENTRE or doctor/physician.

Skin contact : Remove contaminated clothing and shoes.

Rinse immediately with plenty of water for at least 15 minutes.

Call a POISON CENTRE or doctor/physician.

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 POISON CENTRE or doctor/physician.

Ingestion : Call a physician or poison control centre immediately.

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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.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point : Non-Flammable

Protective equipment and precautions for firefighters

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Special protective equipment

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

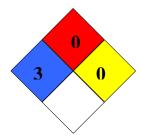
Thoroughly decontaminate fire fighting equipment including all fire fighting wearing

apparel after the incident.

Further information

NFPA Classification : Health Hazard: 3

Fire Hazard: 0 Reactivity Hazard: 0



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.

Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry

containers for disposal.

Additional advice : Treat recovered material as described in the section "Disposal considerations".

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SECTION 7. HANDLING AND STORAGE

Handling

Advice on safe handling : Avoid contact with skin, eyes and clothing.

Avoid breathing dust.

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. Do not contaminate water, food or feed by storage or disposal or cleaning of

equipment.

Storage

Requirements for storage areas and containers

Store in original container.

Keep tightly closed in a dry, cool and well-ventilated place.

Keep out of reach of children. Keep away from animals.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

Components / CAS-No.	Value - Basis - Update	Control parameters	Further information
Sodium tetraborate pentahydrate 12179-04-3	TWA ; OSHA PO 1989-03-01	10 mg/m3	
Sodium tetraborate pentahydrate 12179-04-3	TWA ; ACGIH 2005-01-01	2 mg/m3	A4: The agent (mixture, or exposure circumstance) is not classifiable as to its carcinogenicity to humans. Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.
Sodium tetraborate pentahydrate 12179-04-3	STEL ; ACGIH 2005-01-01	6 mg/m3	A4: The agent (mixture, or exposure circumstance) is not classifiable as to its carcinogenicity to humans. Inhalable fraction. See Appendix C, paragraph A. Inhalable Particulate Mass TLVs (IPM-TLVs) for those materials that are hazardous when deposited anywhere in the respiratory tract.

Engineering measures

Engineering measures : Use with adequate ventilation.

Ensure that eyewash stations and safety showers are close to the workstation

location.

Personal protective equipment

Eye protection : 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 : Remove and wash contaminated clothing before re-use.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : granules

Colour : white

Odour : odourless

Safety data

Flash point : Non-Flammable

pH : 9.3

at

68 °F (20 °C) 3% Solution

Melting point/range : 392 °F (200 °C)

Water solubility : 382 g/l

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid : Moisture/high humidity.

Poor ventilation. High temperatures. Contamination

Materials to avoid : Do not mix with other swimming pool/spa chemicals in their concentrated

forms.

Reducing agents Alkali metals

Hazardous reactions : Hazardous polymerisation does not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat

Dose: > 3,200 mg/kg

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Acute dermal toxicity : LD50 rabbit

Dose: 2,000 mg/kg

<u>Skin irritation</u>: May cause skin irritation.

<u>Eye irritation</u>: Risk of serious damage to eyes.

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.

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.

Contaminated packaging : Do not re-use empty containers.

Rinse thoroughly before discarding in trash.

Offer rinsed packaging material to local recycling facilities.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

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SECTION 15. REGULATORY INFORMATION

National	rea	ulatory	inforn	nation

OSHA Hazards This material is hazardous under the criteria of the Federal OSHA Hazard

Communication Standard 29CFR 1910.1200.

SARA Hazard category Acute Health Hazard

(Product)

US State Regulations

US MA RTK US. The Commonwealth of Massachusetts Department of Public Health; (Component)

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

105 CMR 670.000

Massachusetts hazardous substance

Sodium tetraborate 12179-04-3 100 %

pentahydrate

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.

SECTION 16. OTHER INFORMATION

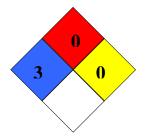
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NFPA Classification : Health Hazard: 3

Fire Hazard: 0
Reactivity Hazard: 0



HMIS Classification : Health Hazard: 3

Flammability: 0

Physical and chemical hazards: 0

PPI:Ask supervisor or safety specialist for handling instructions

Other Emergency Phone Number

Latin America:	Brazil	+52 113 711 91 44
	All other countries	+44 (0)208 762 8322
Mexico:		+52 555 004 87 63

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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