MATERIAL SAFETY DATA SHEET

MSDS

BioGuard Sanitizer Everyday Chlorinating Granules



Date-Issued:04/12/2002 MSDS Ref. No:BBIO22140 Date-Revised:03/12/2003 Revision No:2

1. PRODUCT AND COMPANY IDENTIFICATION PRODUCT NAME: BioGuard Sanitizer Everyday Chlorinating Granules GENERAL USE: Swimming pool sanitizer.

MANUFACTURER Bio-Lab, Inc. BioGuard P.O. Box 300002 Lawrenceville, GA 30049-1002 Customer SERVICE: 800-859-7946

24 HR. EMERGENCY TELEPHONE NUMBERS CHEMTREC (Transportation) (800) 424-9300 Poison Control Center (Medical) 877-800-5553

COMMENTS: EPA Registration Number: 67262-29-5185

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	CAS#	<u>Wt.%</u>
Trichloro-s-triazinetrione	87-90-1	71.8
Boron sodium oxide pentahydrate	12179-04-3	8

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White, granular solid with chlorine odor.

IMMEDIATE CONCERNS: DANGER: Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (safety glasses), protection clothing and rubber gloves. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive. Causes irreversible eye damage.

SKIN: Corrosive. Causes skin burns.

SKIN ABSORPTION: Harmful if absorbed through skin.

INGESTION: Harmful if swallowed.

INHALATION: May be irritating to nose and throat. Avoid breathing dust or vapors.

CHRONIC: 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.

ROUTES OF ENTRY: Skin Contact, Inhalation, Ingestion, Eye Contact.

4. FIRST AID MEASURES

EYES: If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advise.

INGESTION: If swallowed: Call poison control center or doctor immediately for treatment advice. 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.

INHALATION: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call poison control center or doctor for treatment advice.

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

GENERAL HAZARD: This product did not ignite when exposed to pallet scale burn tests. Under extreme heat (>400F), or in a fire environment, this product will evolve noxious chlorine containing gases necessitating the need for self contained breathing apparatus (SCBA) when applying extinguishing media (WATER).

EXTINGUISHING MEDIA: In case of fire or smoke, call the fire department. Do not attempt to extinguish the fire without a self-contained breathing apparatus (SCBA). Allow sprinkler system to contain spread of fire. Flood with copious amounts of water. DO NOT use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

OTHER CONSIDERATIONS:

Oxidizer Test Results:

This product was not classified as an oxidizer when tested by the UN Oxidizer Test. The U.S. Department of Transportation to evaluate potential oxidizers (UN test 0.1) uses this same procedure.

This product was tested using EC Physico/Chemical Test A17, Oxidizing Properties of Solids with confirmation that the material is not considered an oxidizer. Additionally, the auto-flammability of the material using EC Physico/Chemical Test A16, Relative Self Ignition Temperature for Solids was tested. The results show that this product is not classified as a self-igniting solid. Both of these tests were performed under Good Laboratory Practices in the United Kingdom.

Large Scale Burn Study:

A large-scale burn study with this product (825 lb/ 375 kg), at an independent laboratory, resulted in the conclusion that the behavior of this products was consistent with the behavior of an ordinary combustible. Appropriate fire fighter safety precautions, including use of SCBA, should be followed to prevent exposure to smoke due to presence of chlorine species. This study was performed in an environment that models retail space and sprinkler protection with a second product in the set.

Class 4.3 Dangereous When Wet Test Results:

This product was tested under the Guidelines for the Classification and Packing Group Assignment (49 CFR Part 173 Appendix E, 1992) for Division 4.3 "Dangerous when Wet" classification. This product did not evolve significant quantities of gas and did not spontaneously ignite during any of the tests performed with distilled water.

Dust Explosivity:

This product is not considered to be a dust explosive risk based on the Hartmann Dust Explodibility Bomb Test designed by the U.S. Bureau of Mines.

EXPLOSION HAZARDS: 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.

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. When water is applied to material that is burning, loud popping noises will occur.

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.

FIRE FIGHTING PROCEDURES: Firefighters should wear full protective clothing and self-contained breathing apparatus (SCBA). Using a 10% solution of sodium carbonate, thoroughly decontaminate fire fighting equipment including all fire fighting apparel after the incident.

COMMENTS: When water is applied to material that is burning, loud popping noises will occur.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: 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 use floor sweeping compounds to clean up spills. Do not close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form. Do not transport wet or damp material. Keep product out of sewers, watersheds and water systems. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Dispose of according to local, state and federal regulations.

7. HANDLING AND STORAGE

HANDLING: CONTAINS AN OXIDIZING AGENT: DO NOT mix with other products or chemicals. Never add water to product. Always add product in dry form directly to pool or pool skimmer. 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 organic matter or other chemicals will 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 area with large volumes of water.

STORAGE: Keep this product in original closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment. Do not store above 125 F (52 C).

COMMENTS: Refer to Section 5 (General Hazards section of Fire Fighting Measures) for additional information.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SUPPLIER OEL	
		<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Trichloro-s-triazinetrione	TWA	N/E ^[1]		N/E			
Boron sodium oxide pentahydrate	TWA		10		1		
OSHA TABLE COMMENTS:							
1. $N/E = Not Established$							

ENGINEERING CONTROLS: General room ventilation plus local exhaust should be used to maintain exposure below TLV.

PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE: Wear goggles or safety glasses with side shields when handling this product.

SKIN: Wear rubber gloves when handling this product. Avoid contact with skin.

RESPIRATORY: 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.

WORK HYGIENIC PRACTICES: Remove and wash contaminated clothing before reuse.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid ODOR: Chlorine APPEARANCE: Granules COLOR: White pH: ~3.9 VAPOR PRESSURE: Not Available VAPOR DENSITY: Not Determined BOILING POINT: Not Applicable FREEZING POINT: Not Applicable THERMAL DECOMPOSITION: 204°C to 250°C SOLUBILITY IN WATER: 3.4g / 100g water SPECIFIC GRAVITY: 1.0

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperature. Poor ventilation. Contamination. Moisture/high humidity.

STABILITY: This product is stable under normal conditions.

POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: Chlorine containing gases can be produced.

INCOMPATIBLE MATERIALS: This material contains an oxidizing agent. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidizable organic material; ammonia, urea, or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite; alkalis; other swimming pool/spa chemicals in their concentrated forms.

COMMENTS:

Incompatibility Testing: No combustion resulted when this product (10 g) was contaminated (0.5 mL) with three combustible contaminants (brake fluid, algicide, cola).

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: >5000 mg/kg of body weight in rats.

ORAL LD50: 817 mg/kg of body weight in rats

EYE EFFECTS: This product is corrosive to eyes.

SKIN EFFECTS: This product is corrosive to skin.

CARCINOGENICITY:

The components of this product are not listed as a carcinogen by IARC.

The components of this product are not listed as a carcinogen by NTP.

The components of this product are not listed as a carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This pesticide is toxic to fish and 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.

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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Pesticide wastes are toxic. Improper disposal of excess pesticide or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. 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.

EMPTY CONTAINER: Do not reuse container. Rinse thoroughly before discarding in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

OTHER SHIPPING INFORMATION: Bill of Lading Description - Compounds, Swimming Pool, Cleaning or Water Treating, Dry or Liquid (NMFC 50086)

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product contains a listed CERCLA Hazardous Substance with a reportable quantity of 5,000 lb.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

OSHA HAZARD COMM. RULE: Product is hazardous by definition of the Hazardous Communication Standard.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This product is a registered pesticide.

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department

REVISION SUMMARY Revision #: 2

This MSDS replaces the September 17, 2002 MSDS. Any changes in information are as follows: In Section 5 Extinguishing Media Explosion Hazards Other Conditions General Hazards Section 5 Footnotes

In Section 10 Section 10 Footnotes

HMIS RATING

HEALTH:	3
FLAMMABILITY:	1
PHYSICAL HAZARD:	
PERSONAL PROTECTION:	

 HEALTH:
 3

 FIRE:
 1

 REACTIVITY:
 1

NFPA RATING

Key

4 = Severe 3 = Serious 2 = Moderate

1 = Slight

0 = Minimal

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