

**MATERIAL SAFETY DATA SHEET**

MSDS

**BioGuard ALGAE Spot Kill**

**Date-Issued:** 08/26/2004  
**MSDS Ref. No:** BBIO23107  
**Date-Revised:** 02/22/2005  
**Revision No:** 1

**1. PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** BioGuard ALGAE Spot Kill  
**GENERAL USE:** Granular algae killer.  
**CHEMICAL FAMILY:** Chlorinated Isocyanurates

**MANUFACTURER**

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

**24 HR. EMERGENCY TELEPHONE NUMBERS**

**Poison Control Center (Medical) :** (877) 800 - 5553  
**CHEMTREC (US Transportation) :** (800) 424 - 9300

**COMMENTS:** EPA Registration Number: 5185-441

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt.%</u>
Sodium dichloro-s-triazinetriene dihydrate	51580-86-0	99

**COMMENTS:** Available Chlorine: 57%

**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW**

**PHYSICAL APPEARANCE:** White, granular material

**IMMEDIATE CONCERNS:** DANGER: CORROSIVE: Causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin, or on clothing. Do not breathe dust, vapor. Wear goggles, face shield, or safety glasses. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

**POTENTIAL HEALTH EFFECTS**

**EYES:** Contact with dust or vapors can cause irritation, tearing, redness and pain, which may lead to blurred vision, severe tissue burns and even blindness. Avoid contact with eyes.

**SKIN:** On contact with moisture, this material readily hydrolyzes to acid which may result in burns if not promptly removed.

**SKIN ABSORPTION:** Harmful if absorbed through skin.

**INGESTION:** May cause burning of mouth, throat and esophagus, abdominal distress and severe irritation, possibly leading to corrosion of the digestive tract.

**INHALATION:** Breathing dust or fumes may produce throat and respiratory tract irritation. Avoid breathing dust or fumes.

**CHRONIC:** There are no known chronic hazards.

**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.

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## 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** None

**GENERAL HAZARD:** 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. In addition, when in contact with another combustible material, this product will increase the burning rate of the combustible material. When ignited, will burn with the evolution of noxious chlorine containing gases.

**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). Do not let the fire burn. Flood with copious amounts of water. **DO NOT** use ABC or other dry chemical extinguishers since there is the potential for a violent reaction.

**EXPLOSION HAZARDS:** 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.

**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.

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## 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** 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.

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## 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Avoid contact with eyes, skin or clothing. Avoid breathing dust or fumes.

**HANDLING: STRONG OXIDIZING AGENT:** Do not mix with other chemicals. Mix only with water. Never add water to product. Always add product to large quantities of 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 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 dry in its original container. (for bags: Store dry product in its original unopened bag until use. For partially used bags, fold over top of bag and secure with adhesive tape. for bottles: Store dry product in original tightly closed container when not in use. ) Store unopened and partially used containers in a secure location away from children. Store in a cool, dry, well ventilated area away from heat or open flame. Moisture may decompose this product and cause a violent reaction leading to fire and explosion. In case of decomposition, isolate container if possible and flood area with large amounts of water to dissolve all material before discarding this container. Do not contaminate food

or feed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE GUIDELINES:**

**OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)**

	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>SUPPLIER OEL</u>	
	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>
Sodium dichloro-s-triazinetriene dihydrate						
	<b>TWA</b>	N/A <sup>[1]</sup>		N/A		

**OSHA TABLE COMMENTS:**

- 1. N/A = Not Established

**ENGINEERING CONTROLS:** General room ventilation plus local exhaust should be used to minimize exposure to dust/vapors.

**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:** 6 to 7(1% solution @ 25 C)

**VAPOR PRESSURE:** Not Established

**VAPOR DENSITY:** Not Established

**BOILING POINT:** Not Applicable

**MELTING POINT:** 240°C (464°F) to 250°C (480°F)

**THERMAL DECOMPOSITION:** 240°C to 250°C

**SOLUBILITY IN WATER:** 28g/100g water

**DENSITY:** 56 - 60 lb / cu. ft.

**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 is a strong 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.

**11. TOXICOLOGICAL INFORMATION**

**ACUTE**

**ORAL LD<sub>50</sub>:** 1500 mg/kg (rat).

**EYE EFFECTS:** This product is corrosive to eyes.

**SKIN EFFECTS:** This product is corrosive to skin.

**CARCINOGENICITY:**

This product is not listed as a carcinogen by IARC.

This product is not listed as a carcinogen by NTP.

This product is not listed as a carcinogen by OSHA.

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## 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.

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## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated as a DOT Hazardous Material

**AIR (ICAO/IATA)**

**IATA NOTE:** Not recommended for transport by air.

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## 15. REGULATORY INFORMATION

**UNITED STATES**

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**

**311/312 HAZARD CATEGORIES:**

**FIRE:** YES **PRESSURE GENERATING:** NO **REACTIVITY:** YES **ACUTE:** YES **CHRONIC:** NO

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

**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)**

**CERCLA REGULATORY:** This product or its components are not listed.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

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

**TSCA STATUS:** The product contains a hydrated form of a component on the Toxic Substances Control Act (TSCA) Inventory.

Hydrated materials are not included on the Inventory of Chemicals Substances under the authority of TSCA. Instead, they are reported as the anhydrous version of the compound which will be listed under a different CAS number on the TSCA Inventory.

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

**CLEAN WATER ACT:** Not Listed.

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

**SDWA (SAFE DRINKING WATER ACT):** Not listed.

**16. OTHER INFORMATION**

**PREPARED BY:** Regulatory Affairs

**REVISION SUMMARY** Revision #: 1 This MSDS replaces the August 26, 2004 MSDS. Any changes in information are as follows: In Section 1 Prepared By [ ] Print CHEMTREC Phone Number 24 Hour Emergency Phone Numbers In Section 2 Emergency Overview - Immediate Concerns Potential Health Effects - Eyes Potential Health Effects - Skin In Section 4 Firstaid - Eyes Firstaid - Skin Firstaid - Ingestion Firstaid - Inhalation In Section 7 Storage General Procedures In Section 14 IATA Note

**HMIS RATING**

<b>HEALTH:</b>		3
<b>FLAMMABILITY:</b>		1
<b>PHYSICAL HAZARD:</b>		1
<b>PERSONAL PROTECTION:</b>		B

**NFPA RATING**

<b>HEALTH:</b>	3
<b>FIRE:</b>	1
<b>REACTIVITY:</b>	1

Key

- 4 = Severe
- 3 = Serious
- 2 = Moderate
- 1 = Slight
- 0 = Minimal

**NFPA STORAGE CLASSIFICATION:** NFPA Oxidizer Class 1

**COMMENTS:** The contents and format of this MSDS are in accordance with OSHA Hazard Communication Standard, National Fire Protection Association (NFPA), and Hazardous Materials Identification System (HMIS).

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