MATERIAL SAFETY DATA SHEET

MSDS

BioGuard BurnOut Extreme

Chemtura

Date-Issued: 05/06/2004
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Revision No: 5

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BioGuard BurnOut Extreme
GENERAL USE: Swimming pool shock, oxidizer, and clarifier

MANUFACTURER

Bio-Lab, Inc., A Chemtura Company
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: 5185-496

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS	Wt.%
Calcium Hypochlorite	7778-54-3	47
Calcium Hydroxide	1305-62-0	1 - 5
Calcium Carbonate	471-34-1	0 - 2

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White, granular material

IMMEDIATE CONCERNS: DANGER: Corrosive: Causes irreversible eye damage and skin burns. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes or clothing. Wear protective eyewear (goggles or safety glasses). Wear protective clothing and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash contaminated clothing before reuse.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive. Causes irreversible eye damage. Do not get in eyes.

SKIN: Causes skin burns. Do not get on skin.

SKIN ABSORPTION: Harmful if absorbed through skin.

INGESTION: Harmful if swallowed.

INHALATION: Irritating to nose and throat. Avoid breathing dust or fumes.

CHRONIC: There are no known chronic hazards.

MEDICAL CONDITIONS AGGRAVATED: Persons with preexisting skin disorders are more susceptible to the effects of this product.

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

SENSITIZATION: Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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 Flammable

GENERAL HAZARD: Calcium Hypochlorite is a strong oxidizing agent. May form explosive mixtures with combustible, organic or other oxidizable materials.

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. Water in contact with hot Calcium Hypochlorite can release hydrochloric acid or chlorine gas.

HAZARDOUS COMBUSTION PRODUCTS: Chlorine, oxygen and chlorine monoxide at higher temperature.

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.

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.

7. HANDLING AND STORAGE

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

HANDLING: Contains a 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 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 area with large volumes of water.

STORAGE: Keep this product dry in original tightly closed container when not in use. 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)

		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SUPPLIER OEL	
		ppm	mg/m^3	ppm	mg/m^3	ppm	mg/m^3
Calcium Hypochlorite	TWA	N/E [1]		N/E			
Calcium Hydroxide	TWA		5		5		
Calcium Carbonate	TWA		15		10		

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: 8.95 (5% solution)
VAPOR PRESSURE: Not Established
VAPOR DENSITY: Not Established
BOILING POINT: Not Applicable
FREEZING POINT: Not Applicable
MELTING POINT: Not Established
THERMAL DECOMPOSITION: > 100°C
SOLUBILITY IN WATER: 18g / 100g water
SPECIFIC GRAVITY: 2.35 (water=1) at 20°C
ODOR THRESHOLD: 0.02-0.35 ppm based on chlorine.

COMMENTS:

DENSITY: Bulk Density (granules) = 0.97 g/cc

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, oxygen and chlorine monoxide at higher temperatures.

INCOMPATIBLE MATERIALS: This product contains a strong oxidizing agent. Avoid contact with water on concentrated material in the container. Keep away from household soap, suntan lotion, paint products, solvents, acids, beverages, lighted cigarettes, combustible materials, garbage, dirt, dirty rags, organic materials and other swimming pool/spa chemicals in their concentrated forms. Mixing with any of the above materials can initiate a hazardous decomposition. Contact with acids or moisture evolves chlorine gas. Reacts with ammonia, urea and amines

(can form reactive and toxic chloramines). Metal oxides can cause decomposition.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD_{50}: > 2000 mg/kg of body weight in rabbits.
Primary Irritation Study (rabbit) = 7.3 (corrosive)

ORAL LD_{50}: 1195 mg/kg of body weight in rats

EYE EFFECTS: This product is corrosive to eyes.

SKIN EFFECTS: This product is corrosive to skin.

SENSITIZATION: This product is a potential skin sensitizer.

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.

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.

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, but place in trash collection. Rinse thoroughly before discarding in trash.

GENERAL COMMENTS: 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. Do not reuse container. Rinse throughly before discarding in trash. Disposal of unused, uncontaminated product is regulated according to local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Corrosive Solids, N.O.S. (calcium hypochlorite mixture)
PRIMARY HAZARD CLASS/DIVISION: 8 (Corrosive)
UN/NA NUMBER: UN1759
PACKING GROUP: II
OTHER SHIPPING INFORMATION: This mixture is not an oxidizer based on UN/DOT Test 0.1 and EU A-17 (standard tests for oxidizing solids).

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES:

FIRE: NO **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 is listed as a CERCLA Hazardous Substance.

CERCLA RQ: Calcium hypochlorite RQ is 10 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.

CLEAN WATER ACT: This product is listed as a hazardous substance under the Clean Water Act.

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 Affiars Department

REVISION SUMMARY Revision #: 5 This MSDS replaces the September 03, 2004 MSDS. Any changes in information are as follows: In Section 16 Section 16 Footnotes NFPA Classification

HMIS RATING

HEALTH:	3
FLAMMABILITY:	0
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	B

NFPA RATING

HEALTH:	3
FIRE:	0
REACTIVITY:	1

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

NFPA STORAGE CLASSIFICATION:
NFPA Oxidizer Class 1
Note: Based on third party testing results, for storage this product exhibits the characteristics of a National Fire Protection Association (NFPA) Class 1 Oxidizer per NFPA 430.

MANUFACTURER DISCLAIMER: IMPORTANT: This information is given without a warranty or guarantee. No suggestions for use are intended or shall be construed as a recommendation to infringe any existing patents or violate any Federal, State or local laws. Safe handling and use is the responsibility of the customer. Read the label before using this product. This information is true and accurate to the best of our knowledge.

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).