

MATERIAL SAFETY DATA SHEET

MSDS

ProGuard Brominating Tablets



Date-Issued: 06/21/2002
MSDS Ref. No: BBPG22023
Date-Revised: 06/21/2002
Revision No: New MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ProGuard Brominating Tablets
GENERAL USE: Swimming pool sanitizer.
CHEMICAL FAMILY: Halogenated hydantoin

MANUFACTURER

Bio-Lab, Inc.
 ProGuard
 P.O. Box 1489
 Decatur, GA 30031
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: 8622-41-5185

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS#</u>	<u>Wt. %</u>
1-bromo-3-chloro-5,5-dimethylhydantoin	16079-88-2	98

COMMENTS: Available Bromine: 61% / Available Chlorine: 27%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White tablets with halogen odor.

IMMEDIATE CONCERNS: DANGER: Corrosive: Causes irreversible eye damage and skin burns. Eye contact may cause loss of vision. Irritating to nose and throat. May be fatal if inhaled. Harmful if absorbed through skin or swallowed. Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear goggles with side-shields, face shield or safety glasses; protective clothing and rubber gloves. Wear a mask or pesticide respirator jointly approved by Mine Safety and Health Administration and the National Institute for Occupational Safety and Health. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before re-use.

POTENTIAL HEALTH EFFECTS

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

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

INGESTION: May be fatal if swallowed.

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

MEDICAL CONDITIONS AGGRAVATED: Existing dermatitis may be aggravated by exposure.

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

COMMENTS HEALTH: There are no known chronic hazards.

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 advice.

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

GENERAL HAZARD: In large fires fueled by other materials, this product may smolder for prolonged periods emitting a dense black smoke.

Any spilled material should be considered contaminated. Neutralize to a non-oxidizing material for safe disposal. Material which appears undamaged except for being damp on the outside, should be opened and inspected immediately. If the material is damp, it should be neutralized to a non-oxidizing material for safe disposal.

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: A dust explosion severity determination was performed using the Hartmann Dust Explosibility Bomb designed at the U.S. Bureau of Mines. The product was determined not to be ignitable.

FIRE FIGHTING PROCEDURES: Fires fueled by other materials may release hydrogen bromide, bromine, hydrogen chloride or chlorine. Wear self-contained breathing apparatus. Ammonium phosphate (ABC) fire extinguishers should not be used.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: SPILLS: When handling or dealing with spills, use impact-resistant goggles with side shields, or face shield, body-covering clothes, including impervious rubber or plastic gloves and boots; use a dust respirator if dusting occurs. Sweep up dry spills and dispose of as described for pesticide disposal. If drum contents are contaminated or decomposing, do not reseal container; isolate unsealed drum in the open or in a well-ventilated area; flood with large volumes of water if necessary.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin or clothing. Avoid breathing dust. Do not ship with foods, feeds, drugs, or clothing.

HANDLING: Strong Oxidizer, mix with water only. Reaction with combustible organic materials, bases, moisture or with oxidizers may generate heat, hazardous gases and, possibly fire or explosion. Do not add to dispensers or other equipment that is not dry and clean of any chemical remnants. Does not burn, but will decompose from about 320 F(160 C). Avoid comminution and dusting.

STORAGE: Store in a dark, cool (below 86 F (30 C)), dry, well-ventilated area, in well closed original containers, away from energy sources, combustible materials, oxidizers, strong bases, and moisture. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)							
	TWA	EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SUPPLIER OEL	
		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
1-bromo-3-chloro-5,5-dimethylhydantoin		N/E ^[1]		N/E			
OSHA TABLE COMMENTS:							
1. N/E = 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: Faint halogen odor.

APPEARANCE: Tablet

COLOR: White

pH: 4.5(0.1% solution in DI water)

VAPOR PRESSURE: Not Applicable

VAPOR DENSITY: Not Determined

BOILING POINT: Not Applicable

MELTING POINT: With Decomposition

THERMAL DECOMPOSITION: 145°C to 150°C

SOLUBILITY IN WATER: 0.15g/100g water

DENSITY: 60.1 lb/ft³

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: Hydrogen bromide, bromine, hydrogen chloride, chlorine.

INCOMPATIBLE MATERIALS: 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.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Toxicological studies indicate this product to be corrosive to eyes.

DERMAL LD₅₀: The dermal LD₅₀ is greater than 2.0 g/kg (rabbit). The primary skin irritation index is 6.1 and the product is considered corrosive to skin.

ORAL LD₅₀: 578 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.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This pesticide is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of wastes. 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 acutely hazardous. Improper disposal of excess pesticides, spray mixture, 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.

EMPTY CONTAINER: Triple rinse container. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
PROPER SHIPPING NAME: Oxidizing Solid, N.O.S. (Bromo-chloro-dimethylhydantoin)
PRIMARY HAZARD CLASS/DIVISION: 5.1
UN/NA NUMBER: 1479
PACKING GROUP: II

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 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: 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: Not Listed.
FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT): This product is a registered pesticide.
SDWA (SAFE DRINKING WATER ACT): Not listed.
CLEAN AIR ACT
40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION: Not listed.
CALIFORNIA PROPOSITION 65: This product or its components are not listed on any Proposition 65 lists of carcinogens or reproductive toxicants.

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department
REVISION SUMMARY New MSDS

HMIS RATING		
HEALTH:		3
FLAMMABILITY:		1
PHYSICAL HAZARD:		1
PERSONAL PROTECTION:		B

NFPA RATING	
HEALTH:	3
FIRE:	1
REACTIVITY:	1

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

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