



SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: BROMINATING TABLETS
 Synonym(s): BCDMH Tablets, Bromine Tablets
 Recommended Uses: Disinfectant, Sanitizer, Algaecide
 SDS Reference: 11

Company Information: ALLCHEM PERFORMANCE PRODUCTS, INC. Distributed By: HACHIK DISTRIBUTORS, INC
 6010 NW FIRST PLACE 100 COMMERCE DRIVE
 GAINESVILLE, FL 32607 ASTON PA 19015
 Tel: 352-378-9696
 24 HOUR EMERGENCY NUMBER: INFOTRAC (TRANSPORTATION): 1-800-535-5053

2. HAZARD(S) IDENTIFICATION

Classification: CORROSIVE
 ACUTE ORAL HAZARD
 OXIDIZER
 ENVIRONMENTAL HAZARD



Signal Word: DANGER

Hazard Statements: HEALTH HAZARDS:
 Skin Corrosion - Causes severe skin burns and eye damage - Category 1 - H314
 Eye Damage - Causes serious eye damage - Category 1 - H318
 Oral Toxicity - Harmful if swallowed - Category 4 - H302
 PHYSICAL HAZARDS:
 Oxidizing Solid - May intensify fire, oxidizer - Category 2 - H272
 ENVIRONMENTAL HAZARDS:
 Very toxic to aquatic life - Acute 1 - H400

Precautionary Statements: Causes irreversible eye damage and skin burns. Harmful if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling.

Eye Contact: Causes serious eye damage.

Skin Contact: Causes skin burns. On contact with moisture, this material readily hydrolyzes to acid which may result in burns if not promptly removed.

Inhalation: Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

3. COMPOSITION

| | | <u>PERCENT %</u> | <u>CAS #</u> |
|-----------------------|--|------------------|--------------|
| <u>Chemical Name:</u> | 1-Bromo-3-chloro-5,5-dimethylhydantoin | 96 - 98 | 16079-88-2 |

4. FIRST AID

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

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

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.

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 poison control center or doctor. Do not give anything by mouth to an unconscious person.

Note: Probable mucosal damage may contraindicate the use of gastric lavage.
 Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIREFIGHTING MEASURES



SAFETY DATA SHEET

Suitable / Unsuitable Extinguishing Media: Flood with large volumes of water. Do not use ABC powder, dry chemical. Risk of violent reaction.

Specific Hazards from Chemical: In large fires fueled by other materials, this product may smolder for prolonged periods emitting a dense black smoke. Do not let fire burn.
Harmful combustion products: HBr, HCl, NO2, CO.

Special Protective Equipment: In the event of fire, wear self-contained breathing apparatus. Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

Other Information: Do not let fire burn.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Using appropriate protective clothing and safety equipment, contain spilled material. (See Section 8)

Methods and Materials for cleanup: 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 close containers containing wet or damp material. They should be left open to disperse any hazardous gases that may form.
Do not use floor sweeping compounds to clean up spills. Do not transport wet or damp material. Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

Handling: Strong oxidizing agent. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Avoid breathing vapors. Do not mix with other chemicals. Mix only with water. Never add water to this product. Always add product to large quantities of water. When using automatic feeding devices, always follow manufacturer's directions as to the proper addition of sanitizer product to brominators. Use only clean and dry utensils. Do not add this product to any dispensing devices 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 with large volumes of water.
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: Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of reach of children. Keep away from animals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS

OSHA permissible exposure limit: Contains no substances with occupational exposure limit values.

Appropriate Engineering Controls: Use with adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

Individual Protection Measures: Eye Protection: Goggles or Safety glasses with side-shields.
Skin Protection: Wear rubber gloves. Wash contaminated clothing before reuse.
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|--------------------------------------|---|--|-------------------|
| Appearance: | White tablet | Flammability (solid/gas): | Not applicable |
| Odor: | Faint Halogen | Upper/lower Flammability or Exposure limits: | Not Applicable |
| Odor Threshold: | No data available | Vapor Pressure: | Not Applicable |
| pH: | 4.5 (as aqueous solution), 0.1%, solution | Vapor Density: | Not Applicable |
| Melting Point/Freezing Point: | 248 - 298°F (120 - 148 °C). Decomposes | Density: | 0.87 - 0.92 g/cm3 |
| Initial Boiling Point/Boiling Range: | Not Applicable | Solubility(ies): | 1.5 g/l |
| Flash Point: | Not Applicable | Partition Coefficient: n-octanol/water: | No data available |
| Evaporation Rate: | No data available | Auto-ignition Temperature: | No data available |
| | | Decomposition Temperature: | 298 °F (148 °C) |
| | | Viscosity: | No data available |



SAFETY DATA SHEET

10. STABILITY AND REACTIVITY

| | |
|---------------------------------------|---|
| Stability/Reactivity: | No data available |
| Possibilities of Hazardous Reactions: | Hazardous Polymerization: Will Not Occur |
| Conditions to Avoid: | Remarks: High temperatures. Poor ventilation. Contamination. Moisture/high humidity. |
| Incompatible Materials: | Remarks: 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. |
| Hazardous Decomposition Materials: | Hydrogen halides; Bromine; Chlorine; Carbon oxides; nitrogen oxides (NOx) |

11. TOXICOLOGICAL INFORMATION

| | |
|------------------------|--|
| Acute Toxicity: | Acute Oral LD50: 578 mg/kg (rat) Acute Dermal LD50: > 2,000 mg/kg (rabbit) Skin Irritation: Species: rabbit. Result: Primary Irritation Index (PII) = 6.1 Classification: Corrosive. Remarks: Causes skin burns. Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns. Eye Irritation: Species: rabbit Classification: Corrosive Remarks: Causes serious eye damage. Sensitization: Did not cause sensitization on laboratory animals. |
| Chronic Toxicity: | No data available. |
| Reproductive Toxicity: | No data available. |
| Carcinogenicity: | No data available. |
| Mutagenicity: | No data available. |

12. ECOLOGICAL INFORMATION

| | |
|------------------------|---|
| Aquatic Toxicity: | Toxic to fish and aquatic organisms. Fish - 96 h LC50 0.87 mg/l Daphnia - 48 h EC50 0.46 mg/l Bioconcentration factor (BCF): < 500 |
| Avian Toxicity: | No data available. |
| Environmental Hazards: | This product is toxic to fish and other aquatic organisms. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public 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. Environmental Fate: This product is biodegradable. |

13. DISPOSAL CONSIDERATIONS

| | |
|-----------|--|
| Disposal: | Dispose of waste material in compliance with all federal, state, and local regulations. Improper disposal of excess product, 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 Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance. For registered pesticides, contact your State Pesticide Agency. 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. |
|-----------|--|

14. TRANSPORTATION INFORMATION

| | |
|-----------------|---|
| Transportation: | Please refer to applicable regulations or call company noted under Section I. |
|-----------------|---|

15. REGULATORY INFORMATION

| | |
|------------------|--|
| TSCA: | USA: Reported in the EPA TSCA Inventory. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt D) required. |
| SARA (311, 312): | Fire Hazard |



SAFETY DATA SHEET

Acute Health Hazard
 Reactivity Hazard

SARA 313: No data available.

Right To Know Hazardous Substance List: California Proposition 65: This product is not listed.

Waste Classification: No data available.

Workplace Classification: This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).

CERCLA Reportable Quantity: Not applicable.

EPA NOTES:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use. Following is the hazard information as required on the pesticide label:

SIGNAL WORD: DANGER

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS. DANGER: Highly corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed. Do not get in eyes, on skin or on clothing. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing dust and fumes. Remove and wash contaminated clothing before reuse. Wash thoroughly with soap and water after handling.

PHYSICAL OR CHEMICAL HAZARDS 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.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms.

16. OTHER INFORMATION

ALWAYS COMPLY WITH ALL APPLICABLE INTERNATIONAL, FEDERAL, STATE AND LOCAL REGULATIONS REGARDING THE TRANSPORTATION, STORAGE, USE AND DISPOSAL OF THIS CHEMICAL. Due to the changing nature of regulatory requirements, the REGULATORY INFORMATION listed in Section 15 of this document should NOT be considered all-inclusive or authoritative. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements. The information in this SDS was obtained from sources, which we believe are reliable. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

HMIS Rating: Health: 3
 Flammability: 0
 Reactivity: 1

NFPA Rating: Health: 3
 Flammability: 0
 Reactivity: 1

Revision Date: 6/3/2015

Special Hazard Warning: OX - Oxidizer, Class 2