

Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name: BCDMH TABS

Description: Water treatment antimicrobial solution.

Manufacturer: ENVIRO TECH CHEMICALS, Inc.
500 Winmoore Way
Modesto, CA 95358

Company's Informational Telephone: 209-581-9576

Company's Transportation Emergency: **CHEMTREC 800 424-9300**

NFPA 704M / HMIS Rating: 3/2 Health 0/0 Flammability 0/1 Reactivity OXY/Other

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Our hazard evaluation has identified the following chemical ingredient (s) as hazardous under OSHA's Hazard Communication Rule, 29 CFR 1910.1200. Consult Section 15 for the nature of the hazard.

| <u>Ingredients</u> | <u>CAS #</u> | <u>Approx. %</u> |
|--|--------------|------------------|
| 1-bromo-3-chloro-5,5-dimethylhydantoin | 32718-18-6 | 98% |

SECTION 3: HAZARD IDENTIFICATION

Potential Health Effects:

Emergency Overview:

WARNING: Causes irritation to skin and eyes. Do not get in eyes, on skin, or on clothing. Do not take internally. Keep container closed when not in use. Keep container away from heat and sunlight.

Empty Containers: May contain residual product. Do not reuse container unless properly reconditioned.

Primary Route (s) of Exposure: Eye, Skin

Eye Contact: Can cause acute burns and irritation.

Skin Contact: Can cause irritation of various degrees.

Ingestion: Severe intestinal tract irritant. Do not induce vomiting.

Inhalation: Irritating to the respiratory tract and lungs.

Symptoms of Exposure: A review of available data does not identify any symptoms from exposure not previously mentioned.

Aggravation of Existing Conditions: No data.

SECTION 4: FIRST AID MEASURES

Eyes: Flush with water for 15 minutes holding eyelids open. Call a physician.

Skin: Immediately flush with water for at least 15 minutes. For a large splash, flood body under a shower. Call a physician.

Ingestion: Do not induce vomiting. Give water. Call a physician.

Inhalation: Remove to fresh air. Treat symptoms. Call a physician.

Note to Physicians: Based on the individual reactions of the patient, the physician's judgment should be used to control symptoms and clinical condition. Treat symptomatically and supportively.

CAUTION: If unconscious, having trouble breathing or in convulsions, do not induce vomiting or give water.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None (PMCC) ASTM D-93

Extinguishing Media: Water spray, carbon dioxide, foam, dry chemical

Unusual fire and Explosion Hazard: Material is a strong oxidizer. May combine with various metals (at decomposition) to form further flammable mixtures.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Small Liquid Spill: Contain with absorbent material such as clay or inert absorbent. Shovel reclaimed liquid and absorbent into recovery or salvage drums for disposal. Refer to CERCLA in Section 15.

Large liquid Spill: Dike to prevent further movement and reclaim into recovery or salvage drums or tank truck for disposal. Refer to CERCLA in Section 15. This product can be neutralized of its halogen (active ingredient) components by sprinkling sodium metabisulfite or sodium sulfite on the spilled material.

For large indoor spills, evacuate employees and ventilate area. Those responsible for control and recovery should wear the protective equipment specified in Section 8.

SECTION 7: HANDLING AND STORAGE

Storage: Keep container closed when not in use. Recommended shelf life = 2 years at < 30° C.

Handling: Avoid contact with skin, eyes, and clothing. Do not mix with any other chemicals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protections: If it is possible to generate vapors or mists, a NIOSH approved or equivalent respirator is recommended.

For large spills, entry into large tanks, vessels or enclosed small spaces with inadequate ventilations, a positive pressure, self contained breathing apparatus is recommended.

Ventilation: General ventilation is recommended. Local ventilation is recommended where misting can occur.

Protective Equipment: Use impermeable gloves, boots, apron, and a face shield with chemical splash goggles. Suitable impermeable gloves include neoprene, nitrile, PVC, natural rubber, viton and butyl. A full slicker suit is recommended if gross exposure is possible. The availability of an eye wash fountain and safety shower is recommended.

If clothing is contaminated, remove and thoroughly wash the affected area. Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|-------------------|------------------------|-------------|
| Form: | 1 inch tablets | |
| Color: | White | |
| Water Solubility: | 0.2 mg/l @25° C | |
| Density: | 60 lbs/ft ³ | |
| Specific Gravity: | 1.8-2.0 | ASTM D-1298 |
| Viscosity: | N/A | ASTM D-2983 |
| pH (neat): | N/A | ASTM E-70 |
| Freeze Point: | N/A | ASTM D-1177 |
| Flash Point: | none (PMCC) | ASTM D-93 |

Note: These physical properties are typical values for this product but are not absolute

SECTION 10: STABILITY AND REACTIVITY

Avoid contact with strong acids, (i.e. Sulfuric, phosphoric, nitric, hydrochloric, chromic, sulfamic) which can generate heat, splattering or boiling and the release of toxic fumes. Avoid contact with copper and iron.

Avoid contact with strong oxidizers (i.e. peroxides, chromates, nitric acid, perchlorates, concentrated oxygen, permanganates) which can generate heat, fires, explosions, and the release of toxic fumes.

Thermal Decomposition Products (fires): In the event of combustion, nitrogen, bromine, hydrobromic acid vapors or gases may be formed. Do not breathe smoke or fumes. Wear suitable protective equipment and self-contained respirator.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity Studies: Toxicity studies have been completed on this product. The results are shown below:

| | |
|--|---|
| Inhalation: | LC50 for rats is 1.1 mg/L/4 hr (dry material) |
| Acute Oral Toxicity (Albino Rats): | 929 mg/kg |
| Acute Dermal Toxicity (Rabbit): | Corrosive |
| Primary Skin Irritation Test (Albino Rabbits): | Sensitizer |
| Primary Eye Irritation Test (Albino Rabbits): | Corrosive |

SECTION 12: ECOLOGICAL CONSIDERATION

Results below are based on the product.

Aquatic Data: 96 hr. LC50: 1.2 mg/l eastern oyster; 1.9 mg/l mysid shrimp; 0.4 mg/l Rainbow trout; 0.46 mg/l Bluegill
48 hr LC50: 0.75 mg/l Daphnia magna;
Avian Toxicity: 1839 mg/kg Bobwhite quail (oral LD50); >5620 ppm Mallard Duck (diet LC50)

SECTION 13: DISPOSAL CONSIDERATION

Disposal: If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource and Recovery Act (RCRA) 40 CFR 261. It does not have the characteristics of Subpart C, nor is it listed under Subpart D.

A non-hazardous liquid waste can also be deep well injected in accordance with local, state, and federal regulations.

SECTION 14: TRANSPORT INFORMATION

Proper shipping name/hazard class may vary by packaging, properties, and mode of transportation. Typical proper shipping names for this product are:

| | |
|----------------------------|---|
| Road Transportation Modes: | UN3085, Oxidizing Solid, corrosive, n.o.s. (1-bromo-3-chloro-5,5-dimethylhydantoin) |
| Air Transportation: | UN3085, Oxidizing Solid, corrosive, n.o.s. (1-bromo-3-chloro-5,5-dimethylhydantoin) |
| Transportation: | UN3085, Oxidizing Solid, corrosive, n.o.s. (1-bromo-3-chloro-5,5-dimethylhydantoin) |
| Hazard Class, Primary: | 5.1-Oxidizer |
| Hazard Class, Secondary: | 8 - Corrosive |
| Packaging Group: | II |
| Technical Name: | N/A |
| RQ LBS (Per Package): | N/A |
| RQ Components: | N/A |

SECTION 15: REGULATORY INFORMATION

The following regulations apply to this product.

Federal Regulations:

Viewed in other sections of this MSDS

State Regulations:

California Proposition 65: None of the chemicals on the current Proposition 65 list are known to be present in this product.

Michigan Critical Materials: This product does not contain substance (s) identified on this list.

State Right to Know Laws: N/A

SECTION 16: OTHER INFORMATION

This product material safety data sheet provides health and safety information. The product is to be used in applications consistent with our product literature. Individuals handling this product should be informed of the recommended safety precautions and should have access to this information.

N/A = Not Applicable

ND = None Detected

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