



chemex
industries, inc.

Technical Report

BCDMH BROMINE TABS

- **BCDMH TABS ARE THE LARGEST AND SLOWEST DISSOLVING FORM OF BCDMH.** This is the product of choice for applications where the highest degree of feed control is needed.
- **SAFER HANDLING.** Because of its solid form, BCDMH is easier to handle than most common gas and liquid oxidizing biocides, thereby reducing the likely risk and impact of environmental exposure.
- **ENHANCED ENVIRONMENTAL ACCEPTABILITY.** BCDMH decays rapidly allowing for safe discharge into most wastewater systems.

Description and Use

BCDMH Tabs (1-bromo-3-chloro-5,5-dimethylhydantoin) offers a safer, more effective alternative to chlorine based oxidizing biocides and non-oxidizing biocides for microbiological control in industrial cooling waters. When dissolved in water, BCDMH Tabs generate hypobromous acid.

BCDMH Tabs are registered with the United States Environmental Protection Agency for use in once-through and recirculating cooling waters, heat exchange water systems, air washers equipped with mist eliminators, industrial water scrubbers, influent water systems, brewery pasteurizers, cooling ponds, wastewater treatment systems and pulp and paper mills and sanitizer for pools, spas/hot tubs.

Treatment and Dosing Requirements

BCDMH Tabs effectively control bacterial, algal, and fungal slimes that can cause costly reductions in heat transfer efficiency. BCDMH Tabs can either be dosed on a continuous or intermittent shock basis using a specially engineered Brominator dosing system.

For noticeable fouling, add 0.2 – 0.5 ppm as Cl₂ for continuous dosing or 1 – 2 ppm Cl₂ for intermittent shock dosing. Typically, in well-managed systems, successful control has been demonstrated with dosages in the range of 0.1 – 0.3-ppm total halogen as Cl₂.

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Typical Properties

BCDMH Tabs are white to off-white in color and have a faint halogen odor.

Active Ingredients 1-bromo-3-chloro-5, 5-dimethylhydantoin	Tablet Dimensions 1 1/8" x 0.86" (30 x 19 mm)+/-0.1	Molecular Weight 241.5
Abbreviation BCDMH	Empirical Formula C ₆ H ₆ BrClN ₂ O ₂	Avail Bromine / Chlorine 66.6% +/-1.1 /28.9% +/- 0.3
Tablet Weight 19-21 grams	Solubility @ 25° C 0.2% as BCDMH	Melting Point (°C) 145-150 Decomposes
		% Active Ingredient 98

Storage and Handling Precautions

Keep BCDMH Tabs dry in a tightly closed container. Avoid contamination with moisture, chemicals or any other foreign materials due to risk of explosion, fire and release of hazardous gases. Store in a cool, dry, well-ventilated area away from heat, sunlight, open flames and organic materials such as greases, oils, and solvents.

BCDMH Tabs are corrosive in solution, and may be fatal if swallowed. Inhalation of dust may cause irritation of the nose and throat, and irritation to the skin. Always wear a dust mask approved by the appropriate national authority, impact-resistant safety goggles or safety glasses, and a full-face plastic shield with forehead protection. To avoid contact with skin, wear rubber or plastic gloves, long pants, and long shirtsleeves. Always tuck gloves under shirtsleeves and leave pant legs outside of boots. Wash contaminated clothing and equipment before reuse.

Safety Precautions

Do not leave wet BCDMH exposed to air inside a Brominator feed system. After adding BCDMH but before replacing the top closure, refill the tank with water. Failure to do so may allow for product decomposition leading to pressure to build-up in the feeder. High pressures may lead to rupture of the feeder causing serious bodily injury or property damage by explosion, fire or release of hazardous gases.

Contact of BCDMH Tabs with organic materials such as alcohols, aldehydes, and ketones, or strong reducing agents may cause a chemical reaction leading to a pressure build-up in the feeder. High pressure may lead to rupture of the feeder causing serious bodily injury or property damage.

Packaging Information

BCDMH Tabs are available in 50 lb pails

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