



## PRODUCT NAME: BCDMH TABLETS (BROMINE TABLETS)

### PRODUCT SPECIFICATION

Property	Limits		Method #	COA
	Minimum	Maximum		
Assay (%)	93.0	99.0	QCS8132	Y
Available Bromine, %	60		QCS8132	Y
Available Chlorine, %	26		QCS8132	Y
Appearance	White Tablets		GM7602	Y

Y=Analysed and Reported

- BromiCide® TABLETS ARE THE LARGEST AND SLOWEST DISSOLVING FORM OF BromiCide. This is the product of choice for applications where the highest degree of feed control is needed.
- SAFER HANDLING. Because of its solid form, BromiCide 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. BromiCide decays rapidly allowing for safe discharge into most wastewater systems.

#### Description and Use

BromiCide Tablets (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, BromiCide Tablets generate hypobromous acid.

BromiCide Tablets 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.

#### Treatment and Dosing Requirements

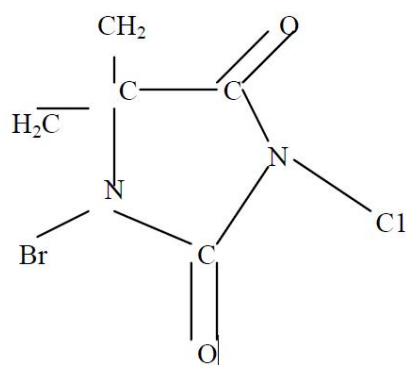
BromiCide Tablets effectively control bacterial, algal, and fungal slimes that can cause costly reductions in heat transfer efficiency. BromiCide Tablets can either be dosed on a continuous or intermittent shock basis using a specially engineered Brominator dosing system.

For noticeable fouling, add 0.2 - 0.5 ppm as Cl<sub>2</sub> for continuous dosing or 1 - 2 ppm as Cl<sub>2</sub> 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 Cl<sub>2</sub>.

#### Typical Properties

BromiCide Tablets are white to off-white in colour and have a faint halogen odour.

## Structural Formula



Active Ingredient	1-bromo-3-chloro-5,5-dimethylhydantoin
Abbreviation	BCDMH
Empirical Formula	C <sub>3</sub> H <sub>6</sub> BrClN <sub>2</sub> O <sub>2</sub>
Molecular Weight	241.5
Tablet Dimensions	1 3/16" X 3/4" (30 x19 mm)
Tablet Weight	20 grams
Solubility @ 25°C	0.2% as BCDMH
% Active Ingredient	96
Melting Point (°C)	145 – 150 Decomposes

### Storage and Handling Precautions

Keep BromiCide Tablets 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, oil, and solvents.

BromiCide Tablets are corrosive in solution, and may be fatal if swallowed. Inhalation of dust may cause irritation of the nose and throat, and irritation to skin. Always wear a dust mask approved by the appropriate national authority, impact-resistant safety goggles or safety glasses, and full-face plastic shield with forehead protection. To avoid contact with skin, wear rubber or plastic glove, 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 BromiCide exposed to air inside a Brominator feed system. After adding BromiCide but before replacing the top closure, refill the tank with water. Failure to do so may allow for product decomposition leading to pressure 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 BromiCide Tablets with organic materials such as alcohols, aldehydes, and ketones, or strong reducing agents may cause a chemicals 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.

Before handling BromiCide Tablets, all persons must be thoroughly aware of the hazardous properties and have reviewed a Material Safety Data Sheet (MSDS).