

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
 MSDS No: Blue Wave Bromine  
 Date Revised: 08/19/2008  
 Revision No: 2

## Blue Wave Bromine

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Wave Bromine  
**GENERAL USE:** Swimming Pool Sanitizer  
**PRODUCT DESCRIPTION:** Mini Slow Dissolving Tablets for Swimming Pool & Spa Disinfecting  
**CHEMICAL FAMILY:** Halogenated Hydantoin

#### DISTRIBUTOR

Blue Wave Products  
 1745 Wallace Ave # B  
 St Charles IL 60174

**Product Stewardship:** (800) 759-0977

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**PHYSICAL APPEARANCE:** White tablet

**IMMEDIATE CONCERNS:** Corrosive. Causes irreversible eye damage and skin burns. Irritating to nose and throat. May be fatal if inhaled. Harmful if absorbed through skin or swallowed. Oxidizer.

#### POTENTIAL HEALTH EFFECTS

**EYES:** Corrosive. May cause temporary or permanent eye damage.

**SKIN:** Exposure to wet skin may cause severe irritation. May cause skin sensitization.

**INHALATION:** Irritant to upper respiratory tract. Shortness of breath, headache and nausea.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
2,4-imidazolidinedione, Bromochloro-5,5-dimethyl	98	032718-18-6	251-171-5

### 4. FIRST AID MEASURES

**EYES:** Hold eyes 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.

**SKIN:** Remove contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

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**INGESTION:** 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:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**NOTES TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE LIMITS:** 0 to 0

**EXTINGUISHING MEDIA:** Dry powder, carbon dioxide or water spray.

**EXPLOSION HAZARDS:** Oxidizing agent. Forms explosive mixtures with combustible, organic or other easily oxidizable materials. When heated to decomposition, may release poisonous and corrosive fumes.

**FIRE FIGHTING PROCEDURES:** Cool containers with water spray. In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode.

### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Evacuate area.

**RELEASE NOTES:** Vacuum or sweep up material and place in a disposal container. Avoid dust formation. Collect solids for waste removal. Rinse contaminated area with plenty of water. Avoid access to streams, lakes or ponds.

**SPECIAL PROTECTIVE EQUIPMENT:** Use dust respirator, rubber gloves and chemical safety goggles.

### 7. HANDLING AND STORAGE

**HANDLING:** Keep containers tightly closed.

**STORAGE:** Keep away from sources of ignition. Store in a cool, dry, well-ventilated area. Keep away from incompatible materials.

**STORAGE TEMPERATURE:** Below 30 degrees C.

**LOADING TEMPERATURE:** For transportation, it is possible to store at temperatures up to 50 degrees C.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
2,4-imidazolidinedione, Bromochloro-5,5-dimethyl	TWA	N/E		N/E	

**ENGINEERING CONTROLS:** Use local exhaust as necessary, especially under dusty conditions. Ventilation must be sufficient to maintain atmospheric concentration below recommended exposure limit.

### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear chemical safety glasses or goggles.

**SKIN:** PVC gloves, body covering clothes and boots.

**RESPIRATORY:** Approved respirator.

**WORK HYGIENIC PRACTICES:** Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Safety shower and eye bath should be provided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Solid

**ODOR:** Faint halogenous odor

**APPEARANCE:** White tablet.

**VAPOR PRESSURE:** 9.35x10<sup>-3</sup> Pa (25 deg C)

**VAPOR DENSITY:** 98

**BOILING POINT:** Not Applicable

**SOLUBILITY IN WATER:** .22 g/100ml

**SPECIFIC GRAVITY:** 1.800 to 2.0

**(VOC):** 98.000

## 10. STABILITY AND REACTIVITY

**HAZARDOUS POLYMERIZATION:** No

**STABILITY:** Stable under normal conditions.

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**CONDITIONS TO AVOID:** Exposure to moisture. Heating above decomposition temperature. Contact with combustible materials may initiate decomposition of the material and emission of smoke.

**HAZARDOUS DECOMPOSITION PRODUCTS:** CO, HBr, Cl<sub>2</sub>, NO<sub>x</sub>, HCl, CO<sub>2</sub>

**INCOMPATIBLE MATERIALS:** Oxidizing agents, bases, and combustible organic materials.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

**ORAL LD<sub>50</sub>:** 929 mg/kg (rat)

**INHALATION LC<sub>50</sub>:** 1.1 mg/l/4 hour (rat)

#### CARCINOGENICITY

**IARC:** Not classified as a carcinogen.

**IRRITATION:** Dermal irritation (rabbit) - Corrosive

**SENSITIZATION:** Sensitizer

**MUTAGENICITY:** Mutagenic by the Ames Test. Mutagenic in the mouse lymphoma L5178Y test system. Non genotoxic in an in-vivo micronucleous test in mice. Non genotoxic in an in-vivo liver unscheduled DNA synthesis (USD) assay.

### 12. ECOLOGICAL INFORMATION

**BIOACCUMULATION/ACCUMULATION:** Based on low Kow values, i.e. less than one, this product would not be predicted to significantly accumulate in aquatic organisms, or sorb to organic material in soil or sediment.

#### AQUATIC TOXICITY (ACUTE)

**96-HOUR LC<sub>50</sub>:** 1.2 mg/l (eastern oyster, Acute flow through)

1.9 mg/l (Mysid shrimp, Acute flow through)

0.4 mg/l (Rainbow trout, Static)

1.6 mg/l (Sheepshead minnow, Acute flow through)

**48-HOUR EC<sub>50</sub>:** 0.75 mg/l (Static) (Daphnia Magna)

#### COMMENTS: Avian Toxicity:

Oral LD<sub>50</sub>, Bobwhite Quail 1839 mg/kg

Dietary LC<sub>50</sub>, Mallard Duck >5620 ppm

Dietary LC<sub>50</sub>, Bobwhite quail >5620 ppm

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of in accordance with applicable local, state, and federal regulations.

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### 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Oxidizing Solid, N.O.S. (Bromochloro-5, 5-Dimethylhydantoin)

**PRIMARY HAZARD CLASS/DIVISION:** 5.1

**UN/NA NUMBER:** UN 1479

**PACKING GROUP:** II

**OTHER SHIPPING INFORMATION:** DOT exception 173.154 - this product qualifies as a Consumer Commodity (ORM-D) when inner packaging does not exceed 2.2 lbs and outer packaging does not exceed 66 lbs.

### 15. REGULATORY INFORMATION

#### UNITED STATES

##### DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Oxidizing

##### SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

**311/312 HAZARD CATEGORIES:** This product is a hazardous chemical under 29CFR 1910.1200 and is categorized as an IMMEDIATE, DELAYED HEALTH and REACTIVITY physical hazard.

**313 REPORTABLE INGREDIENTS:** No ingredients listed at or above the de minimus level.

##### CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

**CERCLA REGULATORY:** Not listed.

**FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):** This is an EPA-registered product.

### 16. OTHER INFORMATION

**REVISION SUMMARY:** Revision #: 2 This MSDS replaces the June 13, 2008 MSDS. Any changes in information are as follows:

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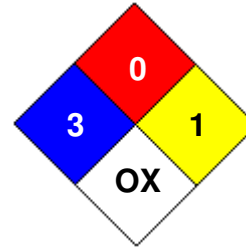
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### HMIS RATING

HEALTH:	3
FLAMMABILITY:	0
PHYSICAL HAZARD:	1
PERSONAL PROTECTION:	

### NFPA CODES



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