

# MATERIAL SAFETY DATA SHEET

Bromine Enhancer.

Date Issued: 07/14/2008

MSDS No: Blue Wave Go Brom

Date Revised: 02/07/2011

Revision No: 3

Blue Wave Go Brom

## 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Wave Go Brom

**GENERAL USE:** Bromine Enhancer.

### DISTRIBUTOR

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

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

## 2. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS

**EYES:** Mild irritant.

**SKIN:** Substance does not irritate intact skin. Slight irritant to abraded skin.

**INGESTION:** Abdominal pain, nausea, vomiting. May cause sleepiness, muscular incoordination and respiratory depression.

**INHALATION:** Irritant to upper respiratory tract.

### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**CHRONIC EFFECTS:** Repeated skin contact may cause dermatitis.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Sodium Bromide	99	7647-15-6	231-599-9

## 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.

**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

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advice.

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

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** Not Flammable

**FLAMMABLE LIMITS:** 0 to 0

**EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire.

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

**HAZARDOUS DECOMPOSITION PRODUCTS:** Will decompose from 800 deg C releasing poisonous and corrosive fumes of hydrogen bromide and sodium oxide.

### 6. ACCIDENTAL RELEASE MEASURES

**GENERAL PROCEDURES:** Sweep up and place in bag. Hold for waste disposal or possible re-use. Ventilate area and wash spill site after material pickup is complete.

**SPECIAL PROTECTIVE EQUIPMENT:** Wear respirator, chemical safety glasses, rubber gloves and boots.

### 7. HANDLING AND STORAGE

**HANDLING:** Avoid bodily contact. Keep containers tightly closed.

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

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 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>
Sodium Bromide	TWA	[1]	[1]	[1]	[1]
<b>Footnotes:</b>					
1. Not established.					

**ENGINEERING CONTROLS:** Use with adequate ventilation.

**PERSONAL PROTECTIVE EQUIPMENT**

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**EYES AND FACE:** Safety glasses recommended.

**SKIN:** Protective gloves.

**RESPIRATORY:** If needed, use OSHA-NIOSH approved respirator with cartridge for dusts/mists.

**PROTECTIVE CLOTHING:** Body protective clothing and shoes.

**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:** None.

**APPEARANCE:** White crystalline granules

**pH:** Not Available

**VAPOR PRESSURE:** 1 mm Hg @ 806 deg C

**VAPOR DENSITY:** N/A.

**BOILING POINT:** 1390°C

**FREEZING POINT:** N/A

**MELTING POINT:** 755°C

**FLASHPOINT AND METHOD:** Not Flammable

**SOLUBILITY IN WATER:** 94.6 g / 100 ml @ 25 deg C

**SPECIFIC GRAVITY:** 3.203

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions. The powder tends to cake under normal storage conditions.

**POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Heating above decomp temperature of 800 deg C.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen bromide and sodium oxide.

**INCOMPATIBLE MATERIALS:** Strong acids, strong oxidants, heavy metal salts. Reacts explosively with bromine trifluoride.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**DERMAL LD<sub>50</sub>:** > 2000 mg/kg (rabbit)

**ORAL LD<sub>50</sub>:** 4200 mg/kg (rat)

**EYE EFFECTS:** A slight irritant (rabbit)

**SKIN EFFECTS:** Not a skin irritant (rabbit). Not a sensitizer (guinea pig).

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**TERATOGENIC EFFECTS:** Sodium bromide has been shown to cause embryo-fetal toxicity and malformations in rats at dose levels which also produce maternal toxicity. The No-Observed Effect Level (NOEL) is 100 mg/kg per day, and the acceptable daily intake (ADI) for sodium bromide from food and drinking water in humans is 1 mg/kg per day. Comparable high doses of sodium chloride (table salt) similarly cause malformation, embryo-fetal toxicity, and maternal toxicity in mice.

In the oral gavage pre-natal developmental toxicity study in the Rabbit, there were no obvious effects of maternal treatment on the survival, growth or development of the offspring at any of the dosages investigated. The No Observed Effect Level (NOEL) for the developing conceptus was considered to be 250 mg/kg/day.

**MUTAGENICITY:** Does not induce DNA repair in cultured human epitheloid cells. Not clastogenic in human lymphocytes metaphase analysis. Not mutagenic by the Ames test.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL DATA:** Sodium bromide is an inorganic salt, which fully dissociates in aquatic environment to bromide and sodium ions. It also undergoes degradation in soil to bromide ion (no further degradation or biodegradation will occur.)

**BIOACCUMULATION/ACCUMULATION:** This product is not expected to bioaccumulate.

### AQUATIC TOXICITY (ACUTE)

96-HOUR LC<sub>50</sub>: > 1000 mg/L (Rainbow Trout)

48-HOUR EC<sub>50</sub>: > 1000 mg/L (Daphnia Magna)

**GENERAL COMMENTS:** Avian Toxicity: Oral LD50 >2250 mg/kg (Bobwhite Quail)  
Dietary LC50 >5633 ppm (Mallard Duck)

## 13. DISPOSAL CONSIDERATIONS

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

## 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** Not Regulated.

## 15. REGULATORY INFORMATION

**UNITED STATES**

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

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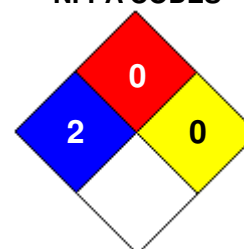
Chemical Name	CAS
Sodium Bromide	7647-15-6

**TSCA STATUS:** All ingredients in this mixture are in compliance with TSCA.**FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):** This is an EPA-registered product.**16. OTHER INFORMATION**

**REVISION SUMMARY:** Revision #: 3. This MSDS replaces the February 07, 2011 MSDS. In Section 10: Stability, Chronic Effects, Potential Health Effects - Eyes In Section 12: Bioaccumulation/Accumulation In Section 12: Bioaccumulation/Accumulation In Section 12: Bioaccumulation/Accumulation In Section 12: Bioaccumulation/Accumulation In Section 4: Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician, Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician, Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician, Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician, Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician, Firstaid - Eyes, Firstaid - Skin, Firstaid - Ingestion, Firstaid - Inhalation, Notes to Physician In Section 6: Special Protective Equipment, Special Protective Equipment, Special Protective Equipment, Special Protective Equipment, Special Protective Equipment, Special Protective Equipment, Special Protective Equipment In Section 10: Stability In Section 12: Bioaccumulation/Accumulation

**HMIS RATING**

<b>HEALTH:</b>	<input type="checkbox"/>	<b>2</b>
<b>FLAMMABILITY:</b>	<input type="checkbox"/>	<b>0</b>
<b>PHYSICAL HAZARD:</b>	<input type="checkbox"/>	<b>0</b>
<b>PERSONAL PROTECTION:</b>	<input type="checkbox"/>	

**NFPA CODES**

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