

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
 MSDS No: Blue Wave pH Reducer  
 Date Revised: 08/20/2008  
 Revision No: 2

## Blue Wave pH Reducer

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Wave pH Reducer  
**GENERAL USE:** pH Decreaser

#### DISTRIBUTOR

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

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

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** Causes eye irritation. May cause skin and respiratory tract irritation. Avoid contact with eyes and skin. Avoid breathing dust. Wash exposed skin thoroughly after handling.

#### POTENTIAL HEALTH EFFECTS

**EYES:** May cause mild to severe irritation. May cause burn if not flushed with water.

**SKIN:** Prolonged exposure may cause moderate irritation. May cause burn if not flushed with water.

**INGESTION:** Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

**INHALATION:** May irritate or burn nose, throat and lungs.

#### SIGNS AND SYMPTOMS OF OVEREXPOSURE

**CARCINOGENICITY:** Not listed by NTP, IARC or OSHA.

**MEDICAL CONDITIONS AGGRAVATED:** Pre-existing respiratory conditions.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Sulfuric Acid, Monosodium Salt	91.5 - 94.7	007681-38-1	231-665-7
Sulfuric Acid Disodium Salt	4.8	007757-82-6	231-820-9

**COMMENTS:** Common Name: Sodium Bisulfate

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
MSDS No: Blue Wave pH Reducer  
Date Revised: 08/20/2008  
Revision No: 2

## Blue Wave pH Reducer

### 4. FIRST AID MEASURES

- EYES:** Immediately flush eyes with water for at least 15 minutes, lifting eyelids to thoroughly flush. If redness persists, get prompt medical attention.
- SKIN:** Immediately flush affected area with water for at least 15 minutes. If burn occurs, seek immediate medical attention.
- INGESTION:** If large amounts are swallowed (greater than a tablespoonful), drink large quantities of water or milk. Follow with Milk of Magnesia, beaten eggs or vegetable oil. Do not induce vomiting. Contact a physician immediately.
- INHALATION:** Remove to fresh air. If breathing has not returned to normal within a few minutes after exposure, get medical attention.

### 5. FIRE FIGHTING MEASURES

- FLASHPOINT AND METHOD:** Not combustible.
- FLAMMABLE LIMITS:** 0 to 0
- GENERAL HAZARD:** Because material will readily dissolve in water to form a weak acid solution, avoid water contact with material, if possible.
- EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire.
- FIRE FIGHTING EQUIPMENT:** Because product readily dissolves in water to form a weak acid solution, use acid protective equipment. No gases or toxic fumes are emitted from this reaction, however if elevated temperatures are reached (above 806 deg F), self contained breathing apparatus should be used.
- HAZARDOUS DECOMPOSITION PRODUCTS:** At temperatures above 806 deg F, hazardous fumes sulfur oxide and sulfur trioxide are evolved.

### 6. ACCIDENTAL RELEASE MEASURES

- GENERAL PROCEDURES:** Vacuum or shovel material and place in disposal container. Avoid excessive dust generation. Dilute residual material with large amounts of water and direct to sanitary sewer if regulations permit.
- COMMENTS:** WATER SPILL: Readily dissolves in water to form a weak acid solution. If water is isolated or can be contained, neutralize with weak alkaline solution. Notify appropriate authorities if required by regulations.

### 7. HANDLING AND STORAGE

- HANDLING:** Wear all recommended personal protective clothing when handling. Avoid contact with eyes. Wash thoroughly after handling. Minimize dust generation. Avoid breathing dust.

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
 MSDS No: Blue Wave pH Reducer  
 Date Revised: 08/20/2008  
 Revision No: 2

## Blue Wave pH Reducer

**STORAGE:** Material is hygroscopic and will readily absorb moisture. Keep containers tightly closed. DO NOT store where exposed to moist conditions. DO NOT store near strong alkalis.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Sulfuric Acid, Monosodium Salt	TWA	ppm <sup>[1]</sup>	mg/m <sup>3</sup> <sup>[1]</sup>	ppm	mg/m <sup>3</sup>	NL ppm	NL mg/m <sup>3</sup>
	STEL	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	NL ppm	NL mg/m <sup>3</sup>
<b>Footnotes:</b>							
1. This material meets the definition as an Irritant as defined in OSHA's Hazard Communication Standard.							

**ENGINEERING CONTROLS:** Local exhaust.

#### PERSONAL PROTECTIVE EQUIPMENT

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

**SKIN:** Rubber gloves and cotton-blend coveralls.

**RESPIRATORY:** In dusty atmospheres (greater than 10 mg/m<sup>3</sup>) use a NIOSH-approved dust respirator.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Dry crystalline solid.

**ODOR:** Fresh to pungent.

**APPEARANCE:** Off-white granular powder.

**pH:** < 1.0 5% aqueous solution spherical shaped beads.

**VAPOR PRESSURE:** N/A

**VAPOR DENSITY:** N/A.

**MELTING POINT:** 350 °C (177 °F)

**FLASHPOINT AND METHOD:** Not combustible.

**SOLUBILITY IN WATER:** 1080 g/L

**DENSITY:** 80-85 lbs/ft<sup>3</sup> (loose)

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
MSDS No: Blue Wave pH Reducer  
Date Revised: 08/20/2008  
Revision No: 2

## Blue Wave pH Reducer

**MOLECULAR WEIGHT:** 120

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable.

**POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Sulfur dioxide and sulfur trioxide are formed when heated over 806 deg F.

**INCOMPATIBLE MATERIALS:** Avoid contact with strong alkaline material such as caustic. Dissolves readily in water to form a weak acid solution. DO NOT mix with liquid chlorine bleach, ammonia cleansers or similar products. Do not store dry product where exposed to moist conditions.

### 11. TOXICOLOGICAL INFORMATION

#### ACUTE

**ORAL LD<sub>50</sub>:** 2800 mg/kg (rat)

**SKIN EFFECTS:** Neither corrosive nor destructive to skin of rabbits. Occasionally a very slight rash may appear.

### 12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION:** This material dissolves in water to form a weak acid solution. A 0.05% or greater (by weight) solution of this product will likely be harmful to aquatic life.

**CHEMICAL FATE INFORMATION:** Material will decompose in soil. Studies show that there are no adverse effects of applying the main ingredient in this product directly to crops. In fact, there are existing products on the market that use sodium bisulfate as a soil additive to improve crop production. However, do not apply excessive quantities to soil.

### 13. DISPOSAL CONSIDERATIONS

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

### 14. TRANSPORT INFORMATION

**DOT (DEPARTMENT OF TRANSPORTATION)**

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008  
 MSDS No: Blue Wave pH Reducer  
 Date Revised: 08/20/2008  
 Revision No: 2

## Blue Wave pH Reducer

**PROPER SHIPPING NAME:** Not Regulated.

### 15. REGULATORY INFORMATION

#### UNITED STATES

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

**313 REPORTABLE INGREDIENTS:** None.

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

**CERCLA RQ:** No.

##### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Sulfuric Acid, Monosodium Salt	007681-38-1
Sulfuric Acid Disodium Salt	007757-82-6

**TSCA REGULATORY:** All components are listed on the TSCA Inventory.

**CALIFORNIA PROPOSITION 65:** There are no chemicals present known to the State of California to cause cancer.

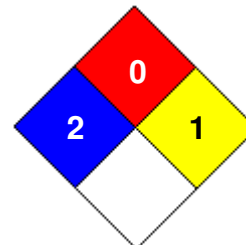
### 16. OTHER INFORMATION

**REVISION SUMMARY:** Revision #: 2 This MSDS replaces the July 01, 2008 MSDS. Any changes in information are as follows:

#### 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>		

#### NFPA CODES



**MANUFACTURER DISCLAIMER:** Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).