

# MATERIAL SAFETY DATA SHEET

Date Issued: 08/18/2008  
 MSDS No: Blue Wave Halt 50  
 Date Revised: 08/19/2008  
 Revision No: 1

## Blue Wave Halt 50

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Wave Halt 50  
**GENERAL USE:** Algaecide

#### DISTRIBUTOR

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

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

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**IMMEDIATE CONCERNS:** DANGER! Corrosive flammable. May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system. May be harmful if swallowed. May be fatal if absorbed through skin.

#### POTENTIAL HEALTH EFFECTS

**EYES:** This product may be corrosive to eyes.

**SKIN:** This product may be corrosive to the skin. May be harmful if absorbed through skin.

**INGESTION:** This product may be harmful or fatal if swallowed.

**INHALATION:** May cause irritation to the respiratory system. Excessive inhalation of this material causes headache, dizziness, nausea and loss of motor skills.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS	EINECS
Water	36 - 40	007732-18-5	231-791-2
Didecyl Dimethyl Ammonium Chloride	50	007173-51-5	- -
Ethanol	9 - 12	000064-17-5	200-578-6
Amines, bis(C8-20-branched and linear alkyl)methyl	0 - 3	108215-84-5	

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Gen medical attention or

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advice.

**SKIN:** For skin contact flush with large amounts of water. Get medical attention or advice. Immediately take off all contaminated clothing. Wash clothing before reuse.

**INGESTION:** If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting. If vomiting occurs spontaneously, have victim lean forward to reduce risk of aspiration. Do not induce vomiting. Never give anything by mouth to an unconscious person or one who is having convulsions.

**INHALATION:** Immediately remove the affected person to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** 33.9°C (93°F) Pensky-Martens CC

**FLAMMABLE LIMITS:** 0 to 0

**EXTINGUISHING MEDIA:** Dry chemical, foam, water fog. Use water to cool fire-exposed containers and to protect personnel.

**EXPLOSION HAZARDS:** Vapors may form explosive mixture with air. Product contains a flammable solvent. Vapors may be released that travel long distances and flash back.

**FIRE FIGHTING EQUIPMENT:** Firefighters should wear full fire-fighting turn-out gear (full bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**COMMENTS:** OSHA flammability IC

### 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Absorb or cover with dry earth, sand or other non-combustible materials and transfer to containers. use clean non-sparking tools to collect absorbed materials.

**LARGE SPILL:** Dike ahead of liquid spill for later disposal. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying your State Water Board or Regional Office of the EPA.

**GENERAL PROCEDURES:** Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed-spaces before entering.

Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Wear appropriate personal protective equipment during cleanup. Stop leak if you can do it without risk.

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### 7. HANDLING AND STORAGE

**HANDLING:** Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists of this product. Keep this product from heat, sparks, or open flame. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

**STORAGE:** Store in a dry place no lower in temperature than 50 deg F or higher than 120 F. DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL. Keep this material in a cool, well ventilated place. Do not handle or store near an open flame, heat or other sources of ignition.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Ethanol	TWA	1000 ppm	1900 mg/m <sup>3</sup>	1000 ppm	1884 mg/m <sup>3</sup>	NL	NL
	STEL	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	NL	NL

**ENGINEERING CONTROLS:** Local exhaust.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear chemical goggles and face shield.

**SKIN:** Impervious gloves.

**RESPIRATORY:** Wear a dust/mist filtering respirator (MSHA/NIOSH approved TC-21C) or a NIOSH approved respirator with an N, R, P or HE Filter.

**PROTECTIVE CLOTHING:** Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves.

**WORK HYGIENIC PRACTICES:** Provide safety shower and eyewash station in the work area.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Flash Point
Didecyl Dimethyl Ammonium Chloride	107

**APPEARANCE:** Clear liquid.

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**pH:** 5.5 to 8.0

**PERCENT VOLATILE:** 47-50

**Notes:** (w/w, includes water)

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** Heavier than air.

**FLASHPOINT AND METHOD:** 33.9°C (93°F) Pensky-Martens CC

**EVAPORATION RATE:** Estimated slower than ethyl ether.

**SPECIFIC GRAVITY:** 0.925

## 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal conditions.

**POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** Keep away from heat, ignition sources and incompatible materials.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Upon decomposition, this product may yield oxides of nitrogen and ammonia.

**INCOMPATIBLE MATERIALS:** May react with strong oxidizing agents, anionic compounds.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**DERMAL LD<sub>50</sub>:** > 20000 mg/kg (rabbit)

**ORAL LD<sub>50</sub>:** > 50-500 mg/kg (rat)

### CARCINOGENICITY

**Notes:** None of the components in this product are listed by IARC, NTP, OSHA or ACGIH as carcinogen.

**GENERAL COMMENTS:** ACGIH: A4 - Not classifiable as a human carcinogen.

NIOSH: Inhalation LC50 20,000 mg/kg (rat) 10 hrs.

Inhalation LC50 39 g/m (mouse) 3/4 hrs

Oral LD50 7060 mg/kg (rat)

Oral LD50 3450 mg/kg (mouse)

## 12. ECOLOGICAL INFORMATION

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**ENVIRONMENTAL DATA:** This product is biodegradable.

**ECOTOXICOLOGICAL INFORMATION:** Hazardous to aquatic organisms.

### 13. DISPOSAL CONSIDERATIONS

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

**EMPTY CONTAINER:** Do not reuse empty container. Triple rinse empty container with water. Plastic containers may be disposed of in a sanitary landfill, incinerated, or if allowed by local authorities, by burning. If burned, stay out of smoke. Offer for recycling if available.

### 14. TRANSPORT INFORMATION

#### DOT (DEPARTMENT OF TRANSPORTATION)

**PROPER SHIPPING NAME:** Disinfectants; Corrosive Liquids, Flammable, N.O.S.

**PRIMARY HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** UN 1903

**PACKING GROUP:** II

### 15. REGULATORY INFORMATION

#### UNITED STATES

#### TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Water	007732-18-5
Didecyl Dimethyl Ammonium Chloride	007173-51-5
Ethanol	000064-17-5
Amines, bis(C8-20-branched and linear alkyl)methyl	108215-84-5

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### STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Ethanol	Ethyl Alcohol: New Jersey Workplace Hazard New Jersey Special Hazard Pennsylvania Workplace Hazard CA Proposition 65 Massachusetts Hazardous Substance New York City Hazardous Substance

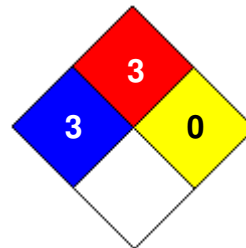
### 16. OTHER INFORMATION

**REVISION SUMMARY:** Revision #: 1 This MSDS replaces the August 18, 2008 MSDS. Any changes in information are as follows: In Section 1 General Use Statement

#### HMIS RATING

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

#### NFPA CODES



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