

MATERIAL SAFETY DATA SHEET

Date Issued: 07/09/2008

MSDS No: Blue Wave Concentrated Algaecide

Date Revised: 08/19/2008

Revision No: 1

Blue Wave Concentrated Algaecide

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Concentrated Algaecide**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 combustible. May be corrosive to the skin and eyes. Harmful or fatal if swallowed.

POTENTIAL HEALTH EFFECTS

EYES: May be corrosive to eyes.

SKIN: May be corrosive to skin. May be harmful if it is absorbed through the skin.

INGESTION: May be harmful or fatal if swallowed.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
N-alkyl (c12-18)-n,n,-dimethyl-n-benzylammonium Chloride	> 50	068391-01-5	269-919-4
Water	< 40	007732-18-5	231-791-2
Ethanol	10	000064-17-5	200-578-6

4. FIRST AID MEASURES

EYES: Hold eyelids apart and immediately flush with plenty of water for at least 15 minutes. Call a physician immediately.

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SKIN: Immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

INGESTION: Seek immediate medical attention. Do not induce vomiting.

INHALATION: If symptoms are experienced, remove source of contamination or move victim to fresh air. If symptoms persist, get medical attention. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention.

NOTES TO PHYSICIAN: If ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: 38.9°C (102°F) Pinsky-Martens CC

Notes: OSHA Flammability: IIIA

FLAMMABLE LIMITS: 0 to 0

EXTINGUISHING MEDIA: Carbon dioxide, water, water fog, dry chemical, chemical foam.

OTHER CONSIDERATIONS: Use water to cool fire-exposed containers and to protect personnel.

EXPLOSION HAZARDS: Product contains a flammable solvent. Vapors may be released that travel long distances, ignite 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.

6. ACCIDENTAL RELEASE MEASURES

SMALL 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 the local sewage treatment plant authority. For guidance, contact 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.

SPECIAL PROTECTIVE EQUIPMENT: Wear appropriate protective equipment and clothing during clean-up.

COMMENTS: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area.) Do not touch or walk through spilled material. Surfaces may become slippery after spillage.

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7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin or eyes. Avoid breathing vapors and mists. 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: 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		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethanol	TWA	1000 ppm	1900 mg/m ³	1000 ppm	1884 mg/m ³	NL	NL
	STEL	ppm	mg/m ³	ppm	mg/m ³	NL	NL

ENGINEERING CONTROLS: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles and face shield.

SKIN: Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. Use impervious gloves.

RESPIRATORY: If vapors are present or irritation is experienced, NIOSH approved respiratory protection for ammoniacal vapors should be worn. Ventilation and other forms of engineering controls are often the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Clear.

pH: 7.3

VAPOR PRESSURE: Not Determined

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VAPOR DENSITY: Heavier than air.

FLASHPOINT AND METHOD: 38.9°C (102°F) Pensky-Martens CC

Notes: OSHA Flammability: IIIA

EVAPORATION RATE: Slower than ether.

SPECIFIC GRAVITY: 0.958

COMMENTS: Percent Volatile: 50% (w/w, includes water)

RVOC: 10% (ethanol)

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Keep away from heat, sparks or open flames.

HAZARDOUS DECOMPOSITION PRODUCTS: Upon decomposition, this product may yield oxides of nitrogen and ammonia; carbon monoxides and carbon dioxide.

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

11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD₅₀: > 50-500 mg/kg (rat)

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

OSHA: Not classified as a carcinogen.

GENERAL COMMENTS:

 Ethanol:

ACGIH: A4 - Not classifiable as a human carcinogen.

NIOSH: Inhalation LC50 20000 mg/kg/10H (rat); Inhalation LC50 39 g/m 3/4 hr (mouse)

Oral LD50 7060 mg/kg (rat); LD50 3450 mg/kg (mouse)

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This product is biodegradable.

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ECOTOXICOLOGICAL INFORMATION: Very toxic to aquatic organisms.

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: Disinfectants; Corrosive Liquids, Flammable, N.O.S.

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1903

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 0.3 gallons.

15. REGULATORY INFORMATION

UNITED STATES

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: No.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
N-alkyl (c12-18)-n,n,-dimethyl-n-benzylammonium Chloride	068391-01-5
Water	007732-18-5
Ethanol	000064-17-5

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

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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

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

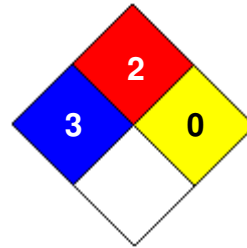
16. OTHER INFORMATION

REVISION SUMMARY: Revision #: 1 This MSDS replaces the July 09, 2008 MSDS. Any changes in information are as follows:

HMIS RATING

HEALTH:	3
FLAMMABILITY:	2
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA CODES



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