

MATERIAL SAFETY DATA SHEET

Date Issued : 07/07/2008
MSDS No : Blue Wave Black Zapper
Date Revised : 02/02/2012
Revision No : 4

Blue Wave Black Zapper

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Black Zapper
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: Corrosive to all tissues contacted: Eyes, skin, respiratory tract, gastrointestinal tract.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to eyes. Burns can occur following exposure. Direct contact may cause impairment of vision, corneal damage and/or blindness. Rinsing of the eye should take place immediately.

SKIN: Corrosive to skin. May be harmful if absorbed through the skin.

INGESTION: May be harmful if swallowed. Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration or perforation.

INHALATION: May cause respiratory tract irritation.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: No known or reported effects from chronic exposure except for effects of those experienced from single exposure.

CARCINOGENICITY: Not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

ROUTES OF ENTRY: Eyes, Skin, Inhalation, Ingestion

SENSITIZATION: Not expected to be a skin sensitizer.

3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name	Wt.%	CAS	EINECS
Triethanolamine	> 1	102-71-6	203-049-8
Ethanolamine	> 1	141-43-5	205-483-3
Alkyl Dimethylbenzylammonium Chloride	> 1	68424-85-1	270-325-2
Basic Copper Carbonate	> 1	12069-69-1	235-113-6
Ethanol	> 1	64-17-5	200-578-6

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 advice.

COMMENTS: Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a doctor or poison control, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Product is not flammable. Not combustible. Not classified as pyrophoric. Not explosive.

FLAMMABLE LIMITS: 0 to 0

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

EXPLOSION HAZARDS: Will not burn.

FIRE FIGHTING PROCEDURES: Use water spray to cool unopened containers.

FIRE FIGHTING EQUIPMENT: Firefighters should wear self-contained breathing apparatus (SCBA) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: This material is soluble in water. If the product contaminates rivers and lakes or drains, inform respective authorities.

LAND SPILL: Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Do not use clay to absorb spill. Avoid

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release to the environment.

AIR SPILL: Keep people away from and upwind of spill/leak.

GENERAL PROCEDURES: Prevent further leakage or spillage if safe to do so. Evacuate personnel to safe areas.

SPECIAL PROTECTIVE EQUIPMENT: Additional protective clothing must be worn to prevent personal contact with this material. Those items include but are not limited to boots, impervious gloves, hard hat, splash-proof goggles, impervious clothing, i.e., chemically impermeable suite, self-contained breathing apparatus.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with skin, eyes and clothing. If in eyes or on skin, rinse well with water. Avoid breathing vapors, mist or gas.

STORAGE: Store in a cool, dry, well-ventilated area away from incompatible materials. Do not freeze.

COMMENTS: Use safe chemical handling procedures suitable for the hazards presented by this material.

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
Triethanolamine	TWA	ppm ^[1]	mg/m ³ ^[1]	ppm	5	NL	NL
	STEL			ppm		NL	NL
Ethanolamine	TWA	3 ppm ^[1]	6 mg/m ³ ^[1]	3 ppm	7.5 mg/m ³	NL ppm	NL mg/m ³
	STEL	ppm	mg/m ³	6 ppm	15 mg/m ³	NL ppm	NL mg/m ³
Basic Copper Carbonate	TWA	^[2]	1 mg/m ³ ^[2]	^[3]	1 mg/m ³ ^[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

Footnotes:

- NL = Not Listed
- dusts and mists
- Calculated as copper TWA dusts and mists

ENGINEERING CONTROLS: Use local exhaust to maintain levels below exposure limits.

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PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles and face shield.

SKIN: Avoid contact with skin. Impervious gloves, boots, apron, and a full impervious suit is recommended if exposure is possible to a large portion of the body.

RESPIRATORY: Wear a NIOSH approved respirator if levels above the exposure limits are possible. A NIOSH approved air purifying respirator with organic vapor cartridge and P95 particulate filter. Air purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed ten times the published limit.

PROTECTIVE CLOTHING: Impervious, neoprene or butyl rubber.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Blue liquid.

pH: 9.5 to 9.7

VAPOR PRESSURE: N/A

VAPOR DENSITY: > 1

FLASHPOINT AND METHOD: Product is not flammable. Not combustible. Not classified as pyrophoric. Not explosive.

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: < 1

SPECIFIC GRAVITY: 1.049

VISCOSITY #1: 34.5 mPa. s. at 20°C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride fumes, oxides of carbon and nitrogen oxide.

INCOMPATIBLE MATERIALS: Strong acids, oxidizing agents, clay.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 1872 mg/kg (rat)

ORAL LD₅₀: 1030 mg/kg (rat)

EYE EFFECTS: Corrosive to eyes.

SKIN EFFECTS: Corrosive to skin.

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CHRONIC: There are no known or reported effects from repeated exposure except those secondary to burns.

CARCINOGENICITY

Notes: This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP or EPA.

SENSITIZATION: Not known or reported to be a skin or respiratory sensitizer.

REPRODUCTIVE EFFECTS: Not known to cause reproductive toxicity.

MUTAGENICITY: Non-mutagenic.

COMMENTS: None available.

12. ECOLOGICAL INFORMATION

COMMENTS: Very toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

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

RCRA/EPA WASTE INFORMATION: This product is not considered a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA).

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Corrosive Liquid N.O.S. (Copper Triethanolamine Complex)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 1760

PACKING GROUP: III

NAERG: 154

MARINE POLLUTANT #1: No.

OTHER SHIPPING INFORMATION: DOT exception 173.154 - this product qualifies as a Limited Quantity when inner packaging does not exceed 1 gallons.

AIR (ICAO/IATA)

SHIPPING NAME: Corrosive Liquid N.O.S. (Copper Triethanolamine Complex)

UN/NA NUMBER: UN 1760

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III

ERG: 154

VESSEL (IMO/IMDG)

SHIPPING NAME: Corrosive Liquid N.O.S. (Copper Triethanolamine Complex)

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UN/NA NUMBER: UN 1760
PRIMARY HAZARD CLASS/DIVISION: 8
PACKING GROUP: III
MARINE POLLUTANT #1: No.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

313 REPORTABLE INGREDIENTS: Deminimus concentration : Diethanolamine value less than 1% by weight;
 Formaldehyde value less than 1% by weight

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: Reportable quantity: Formaldehyde: 100 lbs.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Diethanolamine: 100 lbs.; Formaldehyde: 100 lbs.; Sodium hydroxide: 100 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Triethanolamine	102-71-6
Ethanolamine	141-43-5
Alkyl Dimethylbenzylammonium Chloride	68424-85-1
Basic Copper Carbonate	12069-69-1

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Triethanolamine	Massachusetts Hazardous Substance
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

CALIFORNIA PROPOSITION 65: Formaldehyde: carcinogen

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

16. OTHER INFORMATION

REVISION SUMMARY: This MSDS replaces the 02/02/2012 MSDS. Revised: **Section 3: Wt.%.**

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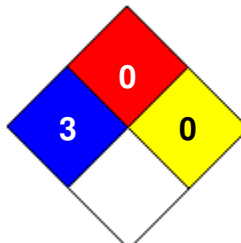
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HMIS RATING

HEALTH	<input type="checkbox"/>	3
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION	<input type="checkbox"/>	

NFPA CODES



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