



Black Zapper™

ACTIVE INGREDIENT:

Copper ethanalamine complex, mixed*.....	9.5%
(Copper MEA Complex CAS No. 14215-52-2, Copper TEA Complex CAS No. 82027-59-6)	
n-Alkyl(50% C ₁₄ , 40% C ₁₂ , 10%, C ₁₆) dimethyl benzyl ammonium chloride.....	26.3%
OTHER INGREDIENTS.....	64.2%
TOTAL.....	100%

*Metallic Copper equivalent, 3.07%

KEEP OUT OF REACH OF CHILDREN

DANGER

See other precautions and first aid on back panel.

Controls the Growth of Problem Algae In Swimming Pools

**NET CONTENTS
32 FL. OZ (946 ml)**

CHEMICAL HAZARDS

Do not mix this algacide with soap or other cleaners. Do not premix with other water treating chemicals. These chemicals must be handled separately.

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

This product controls the growth of problem algae in swimming pools. Brush algae spots prior to application. If necessary brush once each day for two days following application. This product comes concentrated; therefore, dilute the proper dosage of the concentrate with at least nine parts of water. The appropriate amount of product must be added by pouring directly into the pool along the edges while the filter and pump are in operation. To allow time for even distribution in pool water, bathers must allow 15 minutes after treatment before entering pool.

INITIAL APPLICATION: Free of Visible Algae/Start of Season: Apply 12 oz. of this product per 10,000 gallons of water. If algae growth is visible: Apply initial dose, then vacuum pool after 24 hours to remove dead algae. If pool is heavy with algae growth, first brush algae spots, vacuum, clean and scrub the pool walls. Apply initial dose, then vacuum remaining algae debris.

MAINTENANCE DOSE: Apply 6 oz. of this product per 10,000 gallons of pool water every 5 to 7 days. **NOTE:** After heavy or prolonged rainfall, high prevailing temperatures, or heavy swimming use, add the maintenance dose more frequently.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. CORROSIVE. Causes irreversible eye damage and skin burns. May be fatal if absorbed through the skin. Harmful if swallowed or inhaled. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor. Wear goggles or face shield, rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse.

FIRST AID	
IF IN EYES	Hold eyelids open and rinse slowly with water for 15-20 minutes. Remove contact lenses if present after 5 minutes then continue rinsing eye. Call poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
IF SWALLOWED	Call a poison control center 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 a poison control center or a doctor. Do not give anything by mouth to an unconscious person.
IF INHALED	Move person to fresh air. If person is not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate the use of gastric lavage.	

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms.

STORAGE AND DISPOSAL

Do not contaminate food or feed by storage or disposal. Nonrefillable container. Do not reuse or refill this container. Wrap container and put in trash or offer for recycling if available.

Store in a locked storage area inaccessible to children and persons unfamiliar with its use.

Distributed by:
Blue Wave Products
St. Charles, Illinois 60174
1-800-759-0977



EPA Reg. No. 46043-25-63084
EPA Est No. 46043-FL-1
REV091311

32 oz.

30 oz.

28 oz.

26 oz.

24 oz.

22 oz.

20 oz.

18 oz.

16 oz.

14 oz.

12 oz.

10 oz.

8 oz.

6 oz.

4 oz.

2 oz.

MATERIAL SAFETY DATA SHEET

Date Issued: 07/31/2009
MSDS No: Blue Wave Algaecide Concentrate
Date Revised: 08/30/2011
Revision No: 1

Blue Wave Algaecide Concentrate

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Algaecide Concentrate

GENERAL USE: Algaecide

MANUFACTURER

Lonza, Inc.
 90 Boroline Road
 Allendale, NJ 07401
Emergency Phone: 800-777-1875

DISTRIBUTOR

Blue Wave Products
 1745 Wallace Ave # B
 St Charles, IL 60174
Product Stewardship: (800) 759-0977

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: May cause severe irritation and/or chemical burns to eyes and possible irreversible tissue damage.

SKIN: May cause severe irritation and/or chemical burns to skin and possible irreversible tissue damage.

INGESTION: This material may be harmful or fatal if swallowed.

INHALATION: Prolonged inhalation may cause drowsiness, lassitude and inability to concentrate.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Direct contact will produce severe eye and skin irritation and/or chemical burns and possible irreversible tissue damage. Ingestion can produce immediate burning pain in the mouth, throat and abdomen; severe swelling of the larynx; skeletal muscle paralysis affecting the ability to breathe; circulatory shock; and/or convulsions. May be fatal if ingested. Prolonged inhalation may cause drowsiness, lassitude, and inability to concentrate.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
N-alkyl (c12-18)-n,n,-dimethyl-n-benzylammonium Chloride	~ 49.8	68391-01-5	269-919-4
N,n-dialkyl (c12-18)-n-methyl-n-benzylammonium Chloride	~ 0.2	73049-75-9	N/A- -
2-propanol	10	67-63-0	200-661-0
Water	40	7732-18-5	231-791-2

4. FIRST AID MEASURES

EYES: Flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface with water. Get immediate medical attention. If physician is not available, flush for additional 15 minutes and then transport victim to medical care.

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SKIN: Wash with large amounts of running water and soap, if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.

INGESTION: If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). DO NOT induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention. Do not give anything by mouth to a convulsing or unconscious person.

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.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (123 °F)

FLAMMABLE LIMITS: 0 to 0

EXTINGUISHING MEDIA: Alcohol foam, CO₂, Dry Chemical, Water

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

EXPLOSION HAZARDS: FLAMMABLE LIQUID AND VAPORS. Keep away from sparks, flame and open ignition source.

FIRE FIGHTING EQUIPMENT: Wear NIOSH-approved self-contained breathing apparatus and protective clothing. Cool unopened containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Dike and contain spill with inert material (sand, earth, etc.) and transfer the liquid and solid separately to containers for recovery or disposal. Keep spill out of sewers and open bodies of water.

COMMENTS: DANGER! Corrosive and flammable material. Avoid contact. Wear appropriate protective equipment and respiratory protection where mist or vapors of unknown concentrations may be generated (self-contained breathing apparatus preferred).

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Store at temperatures below 140 degrees F. Keep containers closed until used. Ground and bond containers when transferring material. Do not contaminate drinking water, food or feed by storage or disposal.

Empty containers retain product residues and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat or flame. They may explode and cause injury. Follow all MSDS precautions in handling empty containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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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
2-propanol	TWA	400 ppm	980 mg/m ³	200 ppm	490 mg/m ³	NL [1]	NL [1]
	STEL	ppm	mg/m ³	400 ppm	960 mg/m ³	NL	NL
Footnotes:							
1. NL = Not Listed							

ENGINEERING CONTROLS: In processes where mists or vapors may be generated, proper ventilation must be provided in accordance with good ventilation practices.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical splash goggles where there is a potential for eye contact. Use safety glasses with side shields under normal use conditions.

SKIN: Rubber or neoprene gloves to prevent skin contact. Protective clothing (long sleeves, coveralls, or other, as appropriate) to prevent skin contact.

RESPIRATORY: In processes where mists or vapors may be generated, a NIOSH/MSHA jointly approved respirator is advised in the absence of proper environmental controls.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Benzaldehyde like.

APPEARANCE: Blue liquid.

COLOR: Clear.

pH: 6.97

PERCENT VOLATILE: 60

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: 33.333

BOILING POINT: Not Known

FREEZING POINT: Not Known

FLASHPOINT AND METHOD: (123 °F)

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Not Known

DENSITY: 8.02/gal

VISCOSITY: Not Known

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10. STABILITY AND REACTIVITY

STABILITY: Stable.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce toxic vapors/fumes of hydrogen chloride, amines and other organic materials, and oxides of carbon and nitrogen.

INCOMPATIBLE MATERIALS: Strong oxidizing or reducing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 2000 mg/kg (rabbit)

Notes: 6800 mg/kg

ORAL LD₅₀: ~ 515 mg/kg (rat)

EYE EFFECTS: Extreme irritant (rabbit)

SKIN EFFECTS: Corrosive (DOT)

CARCINOGENICITY

IARC: Not classified as a carcinogen.

NTP: Not classified as a carcinogen.

OSHA: Not classified as a carcinogen.

12. ECOLOGICAL INFORMATION

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: Disinfectant Liquid, Corrosive, N.O.S.

TECHNICAL NAME: Mixture of N-Alkyl (C12-18) -N, N-dimethyl-N-benzylammonium chloride and N,N-Dialkyl (C12-18)) -N-methylN-benzylammonium chloride.

PRIMARY HAZARD CLASS/DIVISION: 8

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UN/NA NUMBER: UN 1903

PACKING GROUP: III

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

VESSEL (IMO/IMDG)

SHIPPING NAME: Corrosive Liquid, Flammable, N.O.S.

TECHNICAL NAME: Mixture of N-Alkyl (C12-18) -N, N-dimethyl-N-benzylammonium chloride and N,N-Dialkyl (C12-18)) -N-methylN--benzylammonium chloride.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
2-propanol	10	67-63-0

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	68391-01-5
N,n-dialkyl (c12-18)-n-methyl-n-benzylammonium Chloride	73049-75-9
2-propanol	67-63-0
Water	7732-18-5

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

REGULATIONS

STATE REGULATIONS:

Massachusetts Right To Know: Propan-2-ol CAS#67-63-0

New Jersey Right to Know: Propan-2-ol CAS#67-63-0

Pennsylvania Right to Know: Propan-2-ol CAS#67-63-0

CALIFORNIA PROPOSITION 65:

WARNING. This product contains a chemical known in the State of California to cause cancer.

WARNING. This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

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

16. OTHER INFORMATION

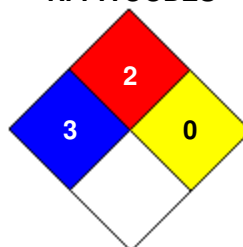
REVISION SUMMARY: This MSDS replaces the 07/31/2009 MSDS.

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NFPA CODES



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