

# SAFETY DATA SHEET

Date Issued : 07/31/2009

MSDS No : Blue Wave Algaecide Concentrate

Date Revised : 06/27/2012

Revision No : 2

## 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

#### DISTRIBUTOR

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

### 2. HAZARDS IDENTIFICATION

#### POTENTIAL HEALTH EFFECTS

**EYES:** Causes eye burns.

**SKIN:** Causes skin burns.

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

**INHALATION:** No information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS	EINECS
Quaternary ammonium compounds, benzyl C12-18 alkyldimethyl, chlorides	~ 49.8	68391-01-5	269-919-4
2-propanol	10	67-63-0	200-661-0
Water	40	7732-18-5	231-791-2

### 4. FIRST AID MEASURES

**EYES:** Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

**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:** Call a physician immediately. Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

**INHALATION:** Move to fresh air. Call a physician immediately. If breathing is irregular or stopped, administer artificial respiration.

### 5. FIRE FIGHTING MEASURES

**FLASHPOINT AND METHOD:** 38°C (100°F) SETA Flash Tester CC

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**Notes:** Does not sustain combustion according to ASTM 4206.

**FLAMMABLE LIMITS:** 0 to 0

**EXTINGUISHING MEDIA:** Dry powder, water spray, foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Heating or fire can release toxic gas.

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

**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.

**RELEASE NOTES:** Do not flush into surface water or sanitary sewer system.

### 7. HANDLING AND STORAGE

**GENERAL PROCEDURES:** Avoid contact with eyes, skin, and clothing.

**HANDLING:** Highly flammable. Keep away from sources of ignition. No smoking. Take precautions against static discharges.

**STORAGE:** Keep container tightly closed and store in a cool, dry, ventilated area away from heat and light.

**STORAGE TEMPERATURE:** Less than 140.0 degrees F (less than 60.0 C)

### 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>
2-propanol	TWA	400 ppm	980 mg/m <sup>3</sup>	200 ppm	490 mg/m <sup>3</sup>	NL [1]	NL [1]
	STEL	ppm	mg/m <sup>3</sup>	400 ppm	960 mg/m <sup>3</sup>	NL	NL
<b>Footnotes:</b> 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 tightly fitting safety goggles.

**SKIN:** Nitrile rubber gloves with break through time greater than 480 min

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**RESPIRATORY:** In misty conditions, use a respirator with approved filter.

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

**OTHER USE PRECAUTIONS:** Avoid contact with skin, eyes and clothing.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**ODOR:** Benzaldehyde like.

**APPEARANCE:** Blue liquid.

**pH:** 6.5 to 8.3

**PERCENT VOLATILE:** 60

**VAPOR PRESSURE:** Not Determined

**VAPOR DENSITY:** 0.96 g/cm<sup>3</sup>

**BOILING POINT:** Not Known

**FREEZING POINT:** Not Known

**FLASHPOINT AND METHOD:** 38°C (100°F) SETA Flash Tester CC

**Notes:** Does not sustain combustion according to ASTM 4206.

**SOLUBILITY IN WATER:** Soluble

**EVAPORATION RATE:** Not Known

**VISCOSITY #1:** < 100 mPa. s. at 77 degrees F (25 C)

### 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 LD<sub>50</sub>:** 3340 mg/kg (rabbit)

**ORAL LD<sub>50</sub>:** 344 mg/kg (rat)

**NOTES:** Above tox data based on N-Alkyl (C12-16)-N,N-dimethyl-N-benzylammonium chloride (CAS No.: 68424-85-1)

**EYE EFFECTS:** Corrosive (rabbit) DOT method.

**SKIN EFFECTS:** Corrosive (rabbit) DOT method, 24 hr exposure

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### 12. ECOLOGICAL INFORMATION

#### AQUATIC TOXICITY (ACUTE)

**96-HOUR LC<sub>50</sub>:** 0.28 mg/L (fathead minnow) EPA method.

**48-HOUR EC<sub>50</sub>:** 0.01 mg/L (Daphnia Magna) OECD Test Guideline 202.

**Notes:** Early-Life Stage NOEC: 0.03 mg/l (fathead minnow); exposure time 34 days; EPA-FIFRA method.

#### CHEMICAL FATE INFORMATION:

##### Biodegradability:

OECD Confirmatory Test: >90%; Method OECD 303A

Modified SCAS Test: >99%; exposure time 7 days; Method: OECD 302A

CO2 Evolution Test: concentration: 5 mg/l; Exposure time 28 days. Readily biodegradable. 95.5%; Method OECD 301B

**GENERAL COMMENTS:** Above ecotox data refers to: N-Alkyl(C12-16)-N,N-dimethyl-N-benzylammonium chloride (CAS No.: 68424-85-1)

### 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. (N-Alkyl(C12-18)-N,N-dimethyl-N-benzylammonium chloride / isopropanol)

**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 Limited Quantity when inner packaging does not exceed 0.3 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)**

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**311/312 HAZARD CATEGORIES:** Hazard Categories: Health: Immediate (Acute) Health Hazard

**313 REPORTABLE INGREDIENTS:** Propan-2-ol CAS #67-63-0

**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

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

**302/304 EMERGENCY PLANNING**

**EMERGENCY PLAN:** Not listed.

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

**CERCLA RQ:** 1000 lbs.

**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Quaternary ammonium compounds, benzyl C12-18 alkyldimethyl, chlorides	68391-01-5
2-propanol	67-63-0
Water	7732-18-5

**TSCA REGULATORY:** This product can only be used in the EPA registered application noted on the product label.

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

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

## 16. OTHER INFORMATION

**REVISION SUMMARY:** This MSDS replaces the 08/30/2011 MSDS. Revised: **Section 2:** ACUTE TOXICITY, POTENTIAL HEALTH EFFECTS ( SKIN, INHALATION ). **Section 3:** . **Section 4:** EYES, INGESTION, INHALATION. **Section 5:** EXPLOSION HAZARDS, EXTINGUISHING MEDIA, FLASHPOINT AND METHOD, HAZARDOUS COMBUSTION PRODUCTS. **Section 6:** COMMENTS, RELEASE NOTES. **Section 7:** GENERAL PROCEDURES, HANDLING, STORAGE, STORAGE TEMPERATURE. **Section 8:** OTHER USE PRECAUTIONS, PERSONAL PROTECTIVE EQUIPMENT ( EYES AND FACE, RESPIRATORY ). **Section 9:** COLOR, DENSITY, pH, VAPOR DENSITY, VISCOSITY, VISCOSITY #1. **Section 11:** ACUTE ( DERMAL LD<sub>50</sub> (rabbit), DERMAL LD<sub>50</sub> (rabbit), ORAL LD<sub>50</sub> (rat), ORAL LD<sub>50</sub> (rat) ACUTE, EYE EFFECTS, IARC, NTP, OSHA. **Section 12:** CHEMICAL FATE INFORMATION, GENERAL COMMENTS, AQUATIC TOXICITY (ACUTE) ( 48-HOUR EC<sub>50</sub>, 96-HOUR LC<sub>50</sub>, 48-HOUR EC<sub>50</sub>, Notes ). **Section 14:** DOT (DEPARTMENT OF TRANSPORTATION) ( TECHNICAL NAME, PACKING GROUP, OTHER SHIPPING INFORMATION ). **Section 15:** ACUTE, CERCLA RQ, CHRONIC, FIRE, PRESSURE GENERATING, REACTIVITY, 302/304 EMERGENCY PLANNING, 311/312 HAZARD CATEGORIES, 313 REPORTABLE INGREDIENTS, TSCA REGULATORY, CALIFORNIA PROPOSITION 65.

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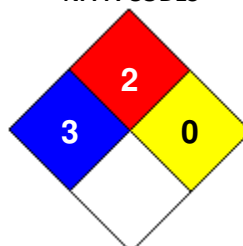
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### NFPA CODES



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