

SAFETY DATA SHEET

Date Issued : 07/24/2009
MSDS No : Blue Wave Halt 50
Date Revised : 06/27/2012
Revision No : 3

Blue Wave Halt 50

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Halt 50
GENERAL USE: Algacide

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

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: CORROSIVE. FLAMMABLE. Harmful in contact with skin. Causes burns. Irritating to eyes.

POTENTIAL HEALTH EFFECTS

EYES: Causes eye irritation.

SKIN: Causes skin burns.

INGESTION: Harmful if swallowed.

INHALATION: May be harmful if inhaled.

ROUTES OF ENTRY: Eyes, Skin, Inhalation, Ingestion

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Didecyl Dimethyl Ammonium Chloride	50	7173-51-5	--
Ethanol	10	64-17-5	200-578-6
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: Immediately wash skin with plenty of soap and water for 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Launder clothing before re-use and discard shoes that cannot be thoroughly cleaned.

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.

SAFETY DATA SHEET

Date Issued : 07/24/2009
 MSDS No : Blue Wave Halt 50
 Date Revised : 06/27/2012
 Revision No : 3

Blue Wave Halt 50

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (109°F) SETA Flash Tester CC

FLAMMABLE LIMITS: Not known to Not known

AUTOIGNITION TEMPERATURE: Not Known

EXTINGUISHING MEDIA: Dry powder, water spray, foam.

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

FIRE FIGHTING PROCEDURES: Use water to cool containers exposed to fire.

FIRE FIGHTING EQUIPMENT: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid runoff to waterways and sewers.

GENERAL PROCEDURES: Contain and/or absorb spill with clay, soil or commercially available absorbents. Block any potential routes to water systems (e.g., sewers, streams, lakes, etc.)

SPECIAL PROTECTIVE EQUIPMENT: Use respirator when performing operations involving potential exposure to vapor or mist.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing. Provide sufficient air exchange and/or exhaust in work rooms.

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

STORAGE: Store containers in compliance with the most recent NFPA code (NFPA 30). Ground all containers prior to pouring. Keep containers closed when not in use. Do not contaminate drinking water, food or feed by storage or disposal.

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

COMMENTS: Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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 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

SAFETY DATA SHEET

Date Issued : 07/24/2009
MSDS No : Blue Wave Halt 50
Date Revised : 06/27/2012
Revision No : 3

Blue Wave Halt 50

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 and face shield.

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

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

PROTECTIVE CLOTHING: Rubber or plastic apron and boots.

WORK HYGIENIC PRACTICES: Avoid contact with skin, eyes and clothing. Wash after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Ethanol-like

pH: 6.5 to 9.0 10% active solution

VAPOR PRESSURE: Not Known

VAPOR DENSITY: 0.93 g/cm³

Notes: at 77 degrees F (25 C)

BOILING POINT: Not Known

FREEZING POINT: -20°C

FLASHPOINT AND METHOD: (109°F) SETA Flash Tester CC

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Not Known

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

10. STABILITY AND REACTIVITY

STABILITY: Stable.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides (NOX); hydrochloric acid; carbon oxides.

INCOMPATIBLE MATERIALS: Strong oxidizing or reducing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 4300 mg/kg (rabbit)

ORAL LD₅₀: 450 mg/kg (rat)

EYE EFFECTS: Severely irritating (rabbit).

SKIN EFFECTS: Corrosive (rabbit) 4 hr, Method:OECD Test Guideline 404

SENSITIZATION: (guinea pig) Not a sensitizer.

SAFETY DATA SHEET

Date Issued : 07/24/2009
 MSDS No : Blue Wave Halt 50
 Date Revised : 06/27/2012
 Revision No : 3

Blue Wave Halt 50

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY (ACUTE)

48-HOUR EC₅₀: .94 mg/L (Daphnia Magna)

CHEMICAL FATE INFORMATION: Biodegradability:

OECD Confirmatory Test: 91%; exposure time 24-70 days; Method OECD 303A

Modified Sturm Test: Concentration 10 mg/l; exposure time 28 days; Readily biodegradeable 72%; Method: OECD 301B

Die-Away Test: concentration: 0.06 mg/l; Exposure time 28 days; 93.3%

COMMENTS: Data is based on Didecyl dimethylammonium chloride (CAS No. 7173-51-5)

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, Liquid, Corrosive, N.O.S (Didecyl dimethylammonium chloride)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 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.

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Corrosive

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This act requires reporting under the Community Right-To-Know provisions due to the inclusion of the following components:

N,N-Didecyl-N,N-dimethylammonium chloride - (CAS 7273-51-5) Hazard Category A

SAFETY DATA SHEET

Date Issued : 07/24/2009
MSDS No : Blue Wave Halt 50
Date Revised : 06/27/2012
Revision No : 3

Blue Wave Halt 50

Ethanol (CAS 64-17-5) Hazard Category F

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

313 REPORTABLE INGREDIENTS: None.

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: None known.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: 1000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Didecyl Dimethyl Ammonium Chloride	7173-51-5
Water	7732-18-5

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

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

CALIFORNIA PROPOSITION 65: This product contains substances which are known to the State of California to cause cancer and/or birth effects or reproductive harm.

16. OTHER INFORMATION

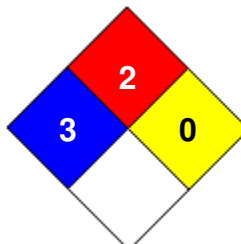
REVISION SUMMARY: This MSDS replaces the 08/30/2011 MSDS. Revised: **Section 2:** CARCINOGENICITY, EMERGENCY OVERVIEW - IMMEDIATE CONCERNS POTENTIAL HEALTH EFFECTS (SKIN, INHALATION, INGESTION), ROUTES OF ENTRY. **Section 4:** EYES, INGESTION, INHALATION, NOTES TO PHYSICIAN. **Section 5:** EXPLOSION HAZARDS, EXTINGUISHING MEDIA, HAZARDOUS COMBUSTION PRODUCTS. **Section 6:** COMMENTS, GENERAL PROCEDURES, SPECIAL PROTECTIVE EQUIPMENT, WATER SPILL. **Section 7:** GENERAL PROCEDURES, HANDLING, STORAGE TEMPERATURE. **Section 8:** PERSONAL PROTECTIVE EQUIPMENT (EYES AND FACE, RESPIRATORY, PROTECTIVE CLOTHING), WORK HYGIENIC PRACTICES. **Section 9:** APPEARANCE, SPECIFIC GRAVITY, VAPOR DENSITY, VISCOSITY #1, (VOC). **Section 10:** HAZARDOUS DECOMPOSITION PRODUCTS. **Section 11:** ACUTE (ORAL LD₅₀ (rat)), EYE EFFECTS, MUTAGENICITY, REPRODUCTIVE EFFECTS, SKIN EFFECTS, CORROSIVITY. **Section 12:** CHEMICAL FATE INFORMATION, COMMENTS, AQUATIC TOXICITY (ACUTE) (96-HOUR LC₅₀, Notes). **Section 15:** CERCLA REGULATORY, CERCLA RQ, REPORTABLE SPILL QUANTITY, CALIFORNIA PROPOSITION 65.

SAFETY DATA SHEET

Date Issued : 07/24/2009
MSDS No : Blue Wave Halt 50
Date Revised : 06/27/2012
Revision No : 3

Blue Wave Halt 50

NFPA CODES



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MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2011

MSDS No: BW Super Rust & Scale

Blue Wave Super Rust & Scale

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Super Rust & Scale
GENERAL USE: Metal Control for swimming pools.

DISTRIBUTOR

Blue Wave Products
 1745 Wallace Ave # B
 St Charles, IL 60174
Product Stewardship: (800) 579-0977

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Causes eye, skin and digestive tract burns. Mist may cause respiratory tract burns.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive. Causes eye burns and permanent tissue damage.

SKIN: Corrosive. Causes permanent skin damage.

INGESTION: Corrosive to mouth, esophagus and stomach.

INHALATION: Mist may be severely irritating to nose, throat and lungs depending upon concentration and duration of exposure.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CARCINOGENICITY: Not listed by NTP, IARC or OSHA.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS	EINECS
Phosphonic Acid, (1-hydroxyethylidene)bis-	2809-21-4	220-552-8

COMMENTS: Proprietary blend. Ingredients in this section have been determined to be hazardous as defined by 29CFR 1910.1200.

4. FIRST AID MEASURES

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

SKIN: Immediately wash with large amounts of water; use soap, if available. Remove contaminated clothing, including shoes, after washing has begun. Get immediate medical attention.

INGESTION: Do not induce vomiting. If individual is conscious, give milk or water to dilute stomach contents. Keep warm and quiet. Get prompt medical attention. Do not attempt to give anything to an unconscious person.

If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty.

MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2011

MSDS No: BW Super Rust & Scale

Blue Wave Super Rust & Scale

INHALATION: Immediately move the victim from exposure and get immediate medical attention. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: > 100°C (212°F) TAG CC

FLAMMABLE LIMITS: Non-flammable.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire.

FIRE FIGHTING PROCEDURES: Material will not burn. Containers can build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed surfaces and to protect personnel.

FIRE FIGHTING EQUIPMENT: Firefighters should wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Contain spilled material with sand or earth. Recover by pumping or with suitable absorbent.

LARGE SPILL: Prevent additional discharge of material if able to do so without hazard. Warn downwind areas of corrosive release hazard. Advise authorities.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Prevent spill rinsate from contamination of storm drains, sewers, soil or groundwater.

GENERAL PROCEDURES: Material is water soluble/dispersible and may not be recoverable.

7. HANDLING AND STORAGE

HANDLING: Keep container closed. Both open and handle container with care. Store in a cool, well ventilated place away from incompatible materials.

Do not pressurize, cut or heat container. Empty product containers may contain product residue. Do not reuse empty containers.

STORAGE: Corrosive to most metals, including carbon steel, aluminum/aluminum alloys and copper /copper alloys.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and face shield.

SKIN: Chemical-resistant gloves.

RESPIRATORY: Where overexposure by inhalation may occur; or other means of exposure reduction are not adequate, approved respirators may be necessary.

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

MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2011

MSDS No: BW Super Rust & Scale

Blue Wave Super Rust & Scale

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid**ODOR:** Faint.**pH:** < 1.1 to 1.6**BOILING POINT:** > 100°C**FREEZING POINT:** < 0°C**FLASHPOINT AND METHOD:** > 100°C (212°F) TAG CC**SOLUBILITY IN WATER:** Soluble**SPECIFIC GRAVITY:** 1.056

10. STABILITY AND REACTIVITY

STABLE: Yes**HAZARDOUS POLYMERIZATION:** No**POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** Contact with common metals might produce flammable hydrogen gas.**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of phosphorous and carbon; acids of phosphorous, phosphine, oxides of carbon, oxides of nitrogen.**INCOMPATIBLE MATERIALS:** Strong oxidizers and strong alkalis.

11. TOXICOLOGICAL INFORMATION

ACUTE

ORAL LD₅₀: 1800 mg/kg (mice)**NOTES:** Listed amounts are for neat product.**TARGET ORGANS:** Neat product may cause damage to the following organs: blood, gastrointestinal tract, upper respiratory tract, skin, eyes, bones.

12. ECOLOGICAL INFORMATION

GENERAL COMMENTS: Listed information is for neat product.**COMMENTS:** LC50 = 527 mg/l 48 hours Daphnia magna

LC50 = 368 mg/l 96 hours Rainbow Trout

LC50 = 868 mg/l 96 hours Bluegill sunfish

13. DISPOSAL CONSIDERATIONS

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

MATERIAL SAFETY DATA SHEET

Date Issued: 04/07/2011

MSDS No: BW Super Rust & Scale

Blue Wave Super Rust & Scale

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Organic, N.O.S. (Phosphonic acid)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 3265

PACKING GROUP: III

REPORTABLE QUANTITY (RQ) UNDER CERCLA: None

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

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: No components of this product are present above the de minimus levels.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components are listed on the TSCA Inventory.

RCRA STATUS: When disposed of, this product may be regulated as a RCRA Hazardous Waste with the characteristic of corrosivity due the pH of the neat material.

16. OTHER INFORMATION

REVISION SUMMARY: New MSDS

HMIS RATING

HEALTH:	<input type="checkbox"/>	3
FLAMMABILITY:	<input type="checkbox"/>	0
PHYSICAL HAZARD:	<input type="checkbox"/>	1
PERSONAL PROTECTION:	<input type="checkbox"/>	

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MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008
 MSDS No: Blue Wave Chlor Burst
 Date Revised: 04/27/2011
 Revision No: 4

Blue Wave Chlor Burst

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Blue Wave Chlor Burst
GENERAL USE: Swimming Pool Shock
PRODUCT DESCRIPTION: Sodium Dichloro-s-triazinetrione Dihydrate
MOLECULAR FORMULA: C₃Cl₂N₃O₃Na·2H₂O
ACTIVE INGREDIENT(S): Sodium Dichloro-s-triazinetrione Dihydrate

DISTRIBUTOR

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

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: White granular product

IMMEDIATE CONCERNS: Corrosive. Causes irreversible eye damage. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Will burn with evolution of chlorine and equally toxic gases. Do not get in eye, on skin, or on clothing. Avoid breathing dust and fumes.

POTENTIAL HEALTH EFFECTS

EYES: Dust and process vapors may irritate eyes.

SKIN: Harmful if absorbed through the skin.

INGESTION: May be harmful if swallowed.

INHALATION: May be fatal if inhaled.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Repeated exposure may cause eye, nose, throat and pharynx irritation.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS	EINECS
Sodium Dichloro-s-triazinetrione Dihydrate	100	51580-86-0	--

COMMENTS: 55.0 - 56.0% active chlorine

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.

MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008

MSDS No: Blue Wave Chlor Burst

Date Revised: 04/27/2011

Revision No: 4

Blue Wave Chlor Burst

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: Drink plenty of water in small gulps. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

INHALATION: Move victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth to mouth, if possible.

ADDITIONAL INFORMATION: Chronic Effect: Prolonged contact may result in irritation to eyes, skin and mucous membranes.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

FLAMMABLE LIMITS: 0 to 0

Notes: Non-flammable.

EXTINGUISHING MEDIA: Use extinguishing measures to suit surroundings. For safety reasons, do not use full water jet.

HAZARDOUS COMBUSTION PRODUCTS:

In case of fire, the following hazardous combustion gases are formed:

Nitrogen; Hydrogen Chloride (HCl); Chlorine (Cl₂); Nitrogen trichloride (explosion hazard); Isocyanic acid; carbon monoxide and carbon dioxide.

EXPLOSION HAZARDS: Highly reactive oxidizing materials may result in fire.

FIRE FIGHTING PROCEDURES: Saturate with massive quantities of water to extinguish thermal decomposing products. If possible, isolate them to an open area, wearing self-contained breathing apparatus with full facepiece and protective clothing.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Sweep up spill with a dry broom and contain. Do not allow material to sit on ground and become moist. Do not contaminate with water, organics or nitrogen compounds.

COMMENTS: Avoid dust formation. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing.

7. HANDLING AND STORAGE

HANDLING: Keep away from moisture, sunlight and high temperatures. Keep away from flammable liquids, combustibles and oxidizers. Avoid dust formation.

STORAGE: Store in a cool, dry, well-ventilated area. Do not store at temperatures above 60 deg C/140 deg F.

STORAGE TEMPERATURE: Less than 25 degrees Celsius.

LOADING TEMPERATURE: Keep away from sources of ignition. Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture and water.

MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008

MSDS No: Blue Wave Chlor Burst

Date Revised: 04/27/2011

Revision No: 4

Blue Wave Chlor Burst

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
Sodium Dichloro-s-triazinetrione Dihydrate	TWA	[1]	[1]	[2]	[2]	[3]	[3]
Footnotes:							
1. 15 mg/m ³ (total dust) TWA; 5 mg/m ³ (respirable) 8-hr TWA for Particulates Not Otherwise Regulated							
2. 3 mg/m ³ (respirable) TWA; 10 mg/m ³ (inhalable) TWA - for Particulates Not Otherwise Classified							
3. The TLV for Chlorine is 0.5 ppm (1.5 mg/m ³) TWA and 1ppm STEL.							

ENGINEERING CONTROLS: Local exhaust with circulation to the outside is needed in the event of decomposition which produces fumes and chlorine gas.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and face shield.

SKIN: Impervious gloves.

RESPIRATORY: If needed, use OSHA-NIOSH approved respirator for dusts, mists, and fumes with TLV not less than 0.05 mg/m³.

PROTECTIVE CLOTHING: Neoprene apron and impervious clothing.

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

COMMENTS: Avoid contact with eyes and skin. Do not inhale dust. Remove soiled or soaked clothing immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid

ODOR: Mild chlorine.

APPEARANCE: White granular.

pH: 6.5

VAPOR PRESSURE: 100

VAPOR DENSITY: 100

BOILING POINT: Not Applicable

FREEZING POINT: Not Applicable

MELTING POINT: Decomposes at 240 degrees C.

FLASHPOINT AND METHOD: Not Applicable

SOLUBILITY IN WATER: 26.2 g/100ml H₂O at 25 degrees C

EVAPORATION RATE: Not Applicable

DENSITY: 16.69 at (68°F)

SPECIFIC GRAVITY: 1.95

MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008

MSDS No: Blue Wave Chlor Burst

Date Revised: 04/27/2011

Revision No: 4

Blue Wave Chlor Burst

VISCOSITY: Not Applicable

(VOC): 100.000

10. STABILITY AND REACTIVITY

STABILITY: Stable under dry and normal conditions.

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Heat, open flames and other sources of ignition. Exothermal reactions are possible in the event of contact with incompatible substances.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen Chloride (HCl), Chlorine, Nitrogen, Nitrogen Chloride, Isocyanic acid.

INCOMPATIBLE MATERIALS: Avoid contact with organic matter. Avoid contact with easily chlorinated or oxidized materials which may result in fire.

Avoid contact with ammonia, ammonium salts, urea or similar compounds which contain nitrogen. This may form nitrogen trichloride, a highly explosive compound.

Avoid contact with oxidizing agents, reducing agents, acids and alkalis.

Avoid contamination with oils and greases which may cause decomposition with the formation of CO₂ and Cl₂.

This product may form an explosive mixture with calcium hypochlorite.

In a formulation containing this material as the major component, alkaline materials such as soda ash (Na₂CO₃) in the presence of moisture may cause violent decomposition and fire.

Avoid contact with alcohols, ethers, and solvents (toluene, xylene, turpentine, etc.)

Avoid contact with small amounts of water. (Do not add water to chemical, add chemical to water.)

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: > 5000 mg/kg (rabbit)

Notes: Merck

ORAL LD₅₀: 500-1600 mg/kg (rat)

Notes: Merck

NOTES: Contact with eyes and skin may cause irritation.

COMMENTS: Acute Toxicity: Oral LD₅₀ 738 mg/kg (rat) 1355 (male) 1400 (female)

12. ECOLOGICAL INFORMATION

MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008

MSDS No: Blue Wave Chlor Burst

Date Revised: 04/27/2011

Revision No: 4

Blue Wave Chlor Burst

AQUATIC TOXICITY (ACUTE)

48-HOUR EC₅₀: 3.19 TLM ppm Oryzias Latipes

GENERAL COMMENTS: Very toxic to aquatic organisms. May cause long term adverse effects in the aquatic environment. Do not discharge into aquatic environment, drains or sewage treatment plants. Marine pollutant.

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: Not regulated if non-bulk (under 882 lbs) via truck or rail.

SPECIAL SHIPPING NOTES: DOT Special Provision #28 states "The dihydrated sodium salt of dichlorisocyanuric acid is not subject to the requirements of this subchapter."

VESSEL (IMO/IMDG)

SHIPPING NAME: Environmentally Hazardous Substances, Solid, N.O.S. (Sodium Dichlorisocyanurate dihydrate), Marine Pollutant

UN/NA NUMBER: 3077

PRIMARY HAZARD CLASS/DIVISION: 9

PACKING GROUP: III

NOTE: Marine Pollutant

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Not listed.

313 REPORTABLE INGREDIENTS: None.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

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

REGULATIONS

STATE REGULATIONS: Massachusetts Hazardous Substance - Yes
Pennsylvania Hazardous Substance - Yes

CALIFORNIA PROPOSITION 65: NA = Not Applicable

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

16. OTHER INFORMATION

MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008
MSDS No: Blue Wave Chlor Burst
Date Revised: 04/27/2011
Revision No: 4

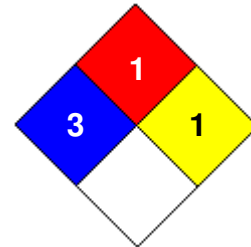
Blue Wave Chlor Burst

REVISION SUMMARY: Revision #: 4. This MSDS replaces the April 27, 2011 MSDS. , International (IMO /IMDG) -
Proper Shipping Name

HMIS RATING

HEALTH:	<input type="checkbox"/>	3
FLAMMABILITY:		1
PHYSICAL HAZARD:		1
PERSONAL PROTECTION:		F

NFPA CODES



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