

# MATERIAL SAFETY DATA SHEET

Date Issued: 07/01/2008

MSDS No: Blue Wave Chlorinating Granules for Spas

Date Revised: 04/27/2011

Revision No: 4

## Blue Wave Chlorinating Granules for Spas

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Blue Wave Chlorinating Granules for Spas

**GENERAL USE:** Spa Sanitizer

**PRODUCT DESCRIPTION:** Sodium Dichloro-s-triazinetrione Dihydrate

**MOLECULAR FORMULA:** C<sub>3</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>3</sub>Na·2H<sub>2</sub>O

**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.

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**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 (Cl<sub>2</sub>); 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.

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

**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 H<sub>2</sub>O at 25 degrees C

**EVAPORATION RATE:** Not Applicable

**DENSITY:** 16.69 at (68°F)

**SPECIFIC GRAVITY:** 1.95

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**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 CO<sub>2</sub> and Cl<sub>2</sub>.

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 (Na<sub>2</sub>CO<sub>3</sub>) 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 LD<sub>50</sub>:** > 5000 mg/kg (rabbit)

**Notes:** Merck

**ORAL LD<sub>50</sub>:** 500-1600 mg/kg (rat)

**Notes:** Merck

**NOTES:** Contact with eyes and skin may cause irritation.

**COMMENTS:** Acute Toxicity: Oral LD<sub>50</sub> 738 mg/kg (rat) 1355 (male) 1400 (female)

### 12. ECOLOGICAL INFORMATION

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### AQUATIC TOXICITY (ACUTE)

48-HOUR EC<sub>50</sub>: 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

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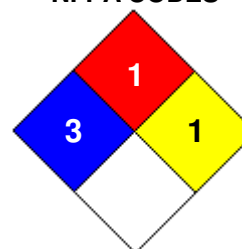
## Blue Wave Chlorinating Granules for Spas

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

### HMIS RATING

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

### NFPA CODES



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