

Date: 3/9/2010 Revision: 02

# **Material Safety Data Sheet**

SeaKlear Spa: Spa-Sanitizing Granules

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name: HaloSource, Inc.

Corporate Address: 1631 220<sup>th</sup> St. SE, Suite 100, Bothell, WA 98021

Manufacturer's Telephone: (425) 881-6464 (Monday-Friday, 8AM-5PM PDT)

Emergency Telephone (24 Hours): 800-424-9300 CHEMTREC (Domestic, North America)

703-527-3887 CHEMTREC (International, collect calls accepted)

Material/Trade/Product Name: SeaKlear Spa: Spa-Sanitizing Granules

**Synonyms:** Sodium dichloroisocyanurate dihydrate; Dichlor dihydrate;

1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt dihydrate;

Troclosene sodium, dihydrate; SDCC dihydrate; NaDCC dihydrate

Chemical Name:Not available.Chemical Formula: $C_3N_3O_3Cl_2Na.2H_2O$ CAS No.:Not applicable.EPA Re. No.:46043-11-72083Product Use:Spa Sanitizer

### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	COMPONENT		OSHA HAZARDOUS?
51580-86-0	Sodium Dichloro-S-Triazinetrione Dihydrate		Yes

NOTE: See Section 8 for permissible exposure limits.

# **SECTION 3: HAZARDS IDENTIFICATION**

# **EMERGENCY OVERVIEW**

Solid white granular with a mild chlorine odor.

DANGER: Corrosive. Causes irreversible eye damage. May cause burns to moist skin if not promptly removed. May be fatal if inhaled. Harmful if swallowed or absorbed through the skin. Irritating to nose and throat.

This pesticide is toxic to fish and aquatic organisms.

# POTENTIAL HEALTH EFFECTS

**EYE:** This material is corrosive to the eye. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of contact.

**SKIN:** This material is moderately irritating to the skin. Direct contact with wet material or moist skin may cause severe irritation, pain, and possibly burns. Dry material is less irritating than wet material. This material is not a skin sensitizer based on studies with guinea pigs.

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**INHALATION:** This material in the form as sold is not expected to produce respiratory effects. Particles of respirable sizes are generally not encountered. The respirable fraction is typically less than 0.1% by weight for the granular and extra granular grades. If ground or otherwise in a powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes. If significant or prolonged exposure occurs, pulmonary edema may develop, either immediately or more often within a period of 5-72 hours. The symptoms may include tightness in the chest dyspnea, frothy sputum, cyanosis, and dizziness. Physical findings may include moist rales, low blood pressure and high pulse pressure. Severe cases may be fatal.

**INGESTION:** Not a likely route of exposure. Harmful if swallowed. Ingestion may cause immediate pain and severe burns of the mucous membranes. There may be discoloration of the tissues. Swallowing and speech may be difficult at first and then almost impossible. The effects on the esophagus and gastrointestinal tract may range from irritation to severe corrosion. Edema of the epiglottis and shock may occur.

**CHRONIC EXPOSURE/CARCINOGENICITY:** Based on animal studies, exposure to concentrations of monosodium cyanurate at the solubility limit may cause cardiovascular, kidney and urinary bladder effects.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:** eye disorders, respiratory disorders, skin disorders and allergies

**POTENTIAL ENVIRONMENTAL EFFECTS:** This pesticide is toxic to fish and aquatic organisms.

# **SECTION 4: FIRST AID MEASURES**

### FIRST AID PROCEDURES

**EYE CONTACT:** Immediately flush with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Call a physician at once.

**SKIN CONTACT:** Immediately flush with water for at least 15 minutes. Call physician. If clothing comes in contact with the product, remove immediately and launder before re-use.

**INHALATION:** Remove to fresh air. If breathing is difficult, administer oxygen, keep the person warm and at rest. Call a physician.

**INGESTION:** Do not induce vomiting. Immediately drink large quantities of water. Call a physician at once. Do not give anything by mouth if the person is unconscious or if having convulsions.

**NOTE TO PHYSICIANS**: Probable mucosal damage may contraindicate the use of gastric lavage.

### **SECTION 5: FIRE FIGHTING MEASURES**

FLASH POINT: Not applicable

UPPER FLAMMABLE LIMIT: Not applicable

LOWER FLAMMABLE LIMIT: Not applicable

FLAMMABLITY CLASS (OSHA): Not applicable FLAME PROPAGATION/BURNING RATE: Not available

**UNIQUE FIRE PROPERTIES:** Negligible fire hazard. If heated by outside source to temperatures above 240 C (464 F) this product will undergo self-sustaining decomposition with the evolution of noxious gases but no visible flame. Wet material may generate nitrogen trichloride, an explosion hazard.

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**HAZARDOUS COMBUSTION PRODUCTS:** Thermal decomposition or combustion products: chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene

**EXTINGUISHING MEDIA:** Flood with water. Do not use dry chemicals, carbon dioxide or halogenated extinguishing agents.

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**PROTECTION OF FIREFIGHTERS:** Consider evacuation of personnel located downwind. Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Wear NIOSH approved positive-pressure self-contained breathing apparatus in pressure-demand mode. Material which appears undamaged except for being damp on the outside should be opened and inspected immediately. DO NOT attempt to reseal contaminated drums. Damp material should be neutralized to a non-oxidizing state.

# **SECTION 6: ACCIDENTAL RELEASE MEASURES**

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

**ENVIRONMENTAL PRECAUTIONS:** This pesticide is toxic to fish and aquatic organisms.

**METHODS FOR CLEANING UP:** Keep unnecessary people away, isolate hazard area and deny entry. DO NOT add water to spilled materials. DO NOT use floor sweeping compounds to clean up spills. Sweep and scoop spilled material into clean, dedicated equipment. Every attempt should be made to avoid mixing spilled material with other chemicals o debris when cleaning up. DO NOT attempt to reseal contaminated drums. DO NOT transport wet or damp material Damp material should be neutralized to a non-oxidizing state. Keep out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

# **SECTION 7: HANDLING AND STORAGE**

# SAFE HANDLING RECOMMENDATIONS

**VENTILATION:** Use only in well ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

FIRE PREVENTION: See Section 5.

**SPECIAL HANDLING REQUIREMENTS:** Do not get in eyes, on skin, or on clothing. Avoid breathing vapors o dust when opening container. Avoid creation of dust. Wash thoroughly after handling. Never add water to this product. Always add product to large quantities of water. Use clean, dry utensils. Do not add the product to an dispensing device containing residuals of other products.

### SAFE STORAGE RECOMMENDATIONS

**CONTAINMENT:** Do not allow water to get in container. If liner is present, tie after each use. Keep container tightly closed and properly labeled. Store containers on pallets.

**STORAGE ROOM RECOMMENDATIONS:** Store in original container and in a dry area where temperatures do not exceed 52 C (125 F) for 24 hours.

**INCOMPATIBLE MATERIALS:** Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.

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### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS**: Use only in well ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

**EYE/FACE PROTECTION:** Wear chemical safety goggles.

**SKIN PROTECTION:** Wear protective clothing to minimize skin contact. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Contaminated clothing should be removed and laundered before reuse.

HAND PROTECTION: Wear neoprene gloves.

**RESPIRATORY PROTECTION:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. An MSHA-NIOSH approved full facepiece respirator equipped with chlorine cartridges and a dust/mist type prefilter is recommended.

**GOOD HYGEIENE/WORK PRACTICES:** Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

#### **EXPOSURE GUIDELINES**

PERMISSIBLE EXPOSURE LIMITS						
INGREDIENT	OSHA		WISHA		ACGIH (TLV)	
CAS NO.	TWA	STEL	TWA	STEL	TWA	STEL
Not Applicable	Not	Not	Not	Not	Not	Not
Not Applicable	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

COLOR: White SHAPE: Granular PHYSICAL FORM: Solid ODOR: Mild chlorine

pH: 6-7 @ 25 C (1% solution)
 VAPOR PRESSURE: Not available
 VAPOR PRESSURE: Not available
 BOILING POINT: Not applicable
 FREEZING POINT: Not available

SOLUBILITY IN WATER: 28 g/100 g @ 25 C SPECIFIC GRAVITY OR DENSITY: 1.95 @ 25 C (gm/L)

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

# **SECTION 10: STABILITY AND REACTIVITY**

CHEMICAL STABILITY: Stable under normal conditions.

**CONDITIONS TO AVOID:** Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material.

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**MATERIALS TO AVOID (INCOMPATIBILITY):** Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition or combustion products: chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene

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**HAZARDOUS POLYMERIZATION:** Will not polymerize.

### SECTION 11: TOXICOLOGICAL INFORMATION

**ORAL LD**<sub>50</sub> (rat): 1823mg/kg

DERMAL LD<sub>50</sub> (rabbit): >5000 mg/kg

**INHALATION LC<sub>50</sub> (rat):** >0.27-<1.17 mg/L/4 hour(s)

**SKIN IRRITATION:** Moderate Irritation (rabbit, 24 hr)

**EYE IRRITATION:** Severe Irritation, Corrosive (rabbit, 24 hr)

**SKIN SENSITIZATION:** Not available.

ADDITIONAL INFORMATION: Not available.

### **SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** This pesticide is believed to be highly toxic to aquatic life. 0.25-1.00 mg/L 96 hours LC50 Bluegill Sunfish; 0.13-0.36 mL 96 hours LC50 Rainbow Trout; 1.21 mg/L 96 hours LC50 Inland Silverside

**MOBILITY:** Not available.

**PERSISTENCE AND DEGRADABILITY:** This material is believed not to persist in the environment. Free available chlorine is rapidly consumed by reaction with organic and inorganic materials to produce chloride ion. The stable degradation products are chloride ion and cyanuric acid.

**BIOACCUMULATIVE POTENTIAL:** Trichloroisocyanuric acid hydrolyzes in water liberating chlorine and cyanuric acid. These products are not bioaccumulative.

**ADDITIONAL INFORMATION:** Not available.

### SECTION 13: DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it <u>does</u> meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

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# **SECTION 14: TRANSPORT INFORMATION**

# **U.S. DEPARTMENT OF TRANSPORTATION (DOT):**

**Proper Shipping Name:** Environmentally hazardous substances, solid, n.o.s. (Sodium

Dichloroisocyanurate Dihydrate)

Hazard Class:

Identification Number (UN Number): UN3077
Packing Group (PG): III

Additional Information: Marine pollutant

# **SECTION 15: REGULATORY INFORMATION**

TSCA STATUS: Listed

# **CERCLA REPORTABLE QUANTITY (RQ):**

CHEMICAL NAME	RQ	
Not applicable	Not applicable	

# SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

**SARA TITLE III SECTION 311/312 HAZARD CATEGORIES:** Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE OF PRESSURE
YES	NO	YES	YES	NO

### SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

**CALIFORNIA PROPOSITION 65:** The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

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# **SECTION 16: OTHER INFORMATION**

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#### **REVISION INFORMATION:**

MSDS sections(s) changed since last revision of document:

- Multiple formatting changes to entire MSDS
- Section 1 synonyms, emergency telephone number, chemical formula
- Section 3 emergency overview, all potential health and environmental effects
- Section 5 unique fire properties, hazardous combustion products, extinguishing media, protection of firefighters
- Section 6 environmental precautions, methods for cleaning up
- Section 7 all information
- Section 8 engineering controls, all PPE
- Section 9 misc. data updates
- Section 10 all information
- Section 11 all information
- Section 12 all information
- Section 13 change from "not regulated" to include all regulated information
- Section 14 SARA Title III Section 311/312

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MSDS PREPARED BY: Jeremy Heath, EH&S Manager