

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules**Revision date** 5-15-15**Section 1 Identification**

Product ID: Chlorinating Granules

Chemical Name: Sodium dichloroisocyanurate dehydrate

Synonyms: Sodium dichlor;; Sodium dichloroisocyanurate dihydrate;
Sodium Dichloro-S-Triazinetrione Dihydrate; Troclosene sodium

Chemical Formula: NaCl₂(NCO)₃x2H₂O

CAS Number: 51580-86-0

Product Use: Disinfectant, sanitizer, algacide for pool/spas

Supplier: Oreq Corporation
42306 Remington Avenue
Temecula, CA 92590
951-296-5076

Emergency Phone# Chemtrec: 1-800-424-9300

Section 2 Hazards identification

GHS CLASSIFICATION: Acute Tox. 4, H302 Harmful if swallowed
Eye Irrit. 2, H319 Causes serious eye irritation
STOT SE 3, H335 May cause respiratory irritation
Aquatic Acute 1, H400 - Very toxic to aquatic life
Aquatic Chronic 1, H410 - Very toxic to aquatic life with long lasting effects

GHS SIGNAL WORD: WARNING

HAZARD PICTOGRAMS:



Hazard Statement(s)

H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H410 - Very toxic to aquatic life with long lasting effects
EUH031 - Contact with acids liberates toxic gas

Precautionary Statement(s)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing

NFPA Ratings (Scale 0-4) Health = 2, Fire = 0, Reactivity = 1.
Special Hazard Warning: OXIDIZER

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules

Revision date 5-15-15

Section 3 Composition / Information on ingredients

Components	Weight %	Index No.	EC No.	EU Classification
SODIUM DICHLOROISO CYANURATE, DIHYDRATE 51580-86-0	99-100	#613-030-01-7	220-767-7	Acute Tox. 4 H302 Eye Irrit. 2 H319 STOT SE 3 H335 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 EUH031 (In Accordance with CLP1272/2008) ----- R31 Xi; R36/37 Xn; R22 N; R50/53 (in accordance with DSD67/548/EEC)
SODIUM CHLORIDE 7647-14-5	0-1		231-593-8	None

Section 4 First - aid measures

- Eye contact** Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.
- Skin contact** 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. Get medical attention immediately.
- Inhalation** In case of inhalation, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.
- Ingestion** If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately.

NOTE: Never give an unconscious person anything to drink

Most important symptoms and effects, acute or delayed

- **Ocular** Severe irritation and/or burns can occur following eye exposure. Contact may cause impairment of vision and corneal damage.
- **Dermal** Dermal exposure can cause severe irritation and/or burns characterized by redness, swelling and scab formation. Prolonged skin exposure may cause permanent damage.
- **Inhalation** Irritating to the nose, mouth, throat and lungs. It may also cause burns to the respiratory tract with the production of lung edema that can result in shortness of breath, wheezing, choking, chest pain, and impairment of lung function. Inhalation of high concentrations can result in permanent lung damage from the corrosive action to the lung.
- **Ingestion** Irritation and/or burns can occur to the entire gastrointestinal tract, including the stomach and intestines, characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding and/or tissue ulceration. Ingestion causes severe damage to the gastrointestinal tract with the potential to cause perforation.

Notes to the physician No specific antidote.
Treat symptomatically and supportively.
In case of ingestion DO NOT induce vomiting.
Probable mucosal damage may contraindicate the use of gastric lavage.

Medical conditions aggravated by exposure Asthma, respiratory and cardiovascular disease.

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules

Revision date 5-15-15

Section 5 Fire - fighting measures

Suitable Extinguishing Media: Water

Extinguishing Media Not To Be Used: Do not use dry chemical extinguisher containing ammonia compounds.

Unusual Fire and Explosion Hazards: When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine and CO.

Fire Fighting Procedure: Cool containers with water spray. Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode. On small fires, use water spray or fog. On large fires, use heavy deluge or fog streams. Flooding amounts of water may be required before extinguishment can be accomplished.

Section 6 Accidental release measures

Personal precautions For small spills in a well-ventilated areas, wear a NIOSH approved half-face or full face tight fitting respirator or a loose fitting powered air purifying respirator equipped with chlorine cartridges. Chemical goggles should be worn when using a half-face respirator. In addition to respiratory protection, wear coveralls, chemical resistant gloves, chemical resistant footwear; and chemical resistant headgear for overhead exposure. For clean-up of large spills, or small dry spills in confined areas, wear full-face respirator with chlorine cartridges or a positive pressure supplied air respirator. Additionally, body protection should be impervious clothing covering entire body to prevent personal contact with material. CAUTION - Protection concerns must also address the following: If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

Methods for cleaning up Hazardous concentrations in air may be found in local spill area and immediately downwind. If spill material is still dry, do not put water directly on this product as a gas evolution may occur.

Environmental precautions

- **Soil** Do not contaminate spill material with any organic materials, ammonia, ammonium salts or urea. Clean up all spill material with clean, dry dedicated equipment and place in a clean dry container.

- **Water** This material is heavier than and soluble in water. Stop flow of material into water as soon as possible. Begin monitoring for available chlorine and pH immediately.

- **Air** Vapors may be suppressed by the use of water fog.

Section 7 Handling and storage

Handling Do not take internally. Avoid contact with skin, eyes, and clothing. Upon contact with skin or eyes, wash off with water.

Storage Store in a dry, cool, well-ventilated area. away from incompatible materials (see "materials to avoid"). Do not store at temperatures above 60°C/140°F. Product has an indefinite shelf-life limitation.

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules

Revision date 5-15-15

Section 8 Exposure controls / personal protection

Exposure Limits:

COMPONENTS	ACGIH-TLV Data	OSHA (PEL) Data
SODIUM DICHLOROISO CYANURATE, DIHYDRATE 51580-86-0	Not determined	Not determined
SODIUM CHLORIDE 7647-14-5	Not determined	Not determined

Ventilation requirements Use local exhaust ventilation to minimize dust and chlorine levels where industrial use occurs. Otherwise, ensure good general ventilation.

Personal protective equipment:

- **Respiratory protection** When dusty conditions are encountered, wear a NIOSH/OSHA full-face respirator with chlorine cartridges for protection against chlorine gas and dust/mist pre-filter.
- **Hand protection** Neoprene gloves (0.67 mm)
- **Eye protection** Use chemical safety glasses to avoid eye contact. Where industrial use occurs, chemical goggles may be required.
- **Skin and body protection** Impervious body covering clothes, boots and neoprene apron.

Hygiene measures Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

Section 9 Physical and chemical properties

Appearance	White granules or tablet-form product
Odor	Mild chlorine-like
Odor threshold	Not determined
pH	Not determined
Melting point/range	Not applicable
Boiling point/range	Not applicable
Flash point	Not applicable
Evaporation rate (ether=1)	Not applicable under standard conditions
Flammability (solid, gas)	Not determined
Flammable/Explosion limits	Not determined
Vapor pressure	Not applicable under standard conditions
Vapor density	Not applicable under standard conditions
Relative density	tap density= 0.974 g/mL pour density= 1.083 g/mL
Solubility:	
- Solubility in water	24-25 g/100g
Partition coefficient (n-octanol/water)	LogP - -0.0056 (estimated)
Auto-ignition temperature	Not self-ignitable
Decomposition temperature	Begins to lose 1 mole water at approximately 50°C; second mole water at 95°C; Decomposes at 240-250°C
Viscosity	Not applicable
Explosive properties	Not determined
Oxidising properties	Not oxidizing
Particle size	Non- inhalable

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules
Revision date 5-15-15

Section 10 Stability and reactivity

Reactivity Begins to lose one mole of water at approximately 50°C

Stability Stable under normal conditions

Possibility of hazardous reactions If this material becomes damp/wet or contaminated in a container, the formation of nitrogen trichloride gas may occur and an explosive condition may exist.

Conditions to avoid Heating above decomposition temperature
Do not package in paper or cardboard.

Materials to avoid Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.

Hazardous decomposition products Nitrogen trichloride, chlorine, carbon monoxide

Section 11 Toxicological information**Acute toxicity:**

- Rat oral LD50 1671 mg/kg

- Rat dermal LD50 >5000 mg/kg

- Dermal irritation (rabbit) Severe irritant

- Eye irritation (rabbit) Severe irritant

Dermal sensitization Not a sensitizer.

Immediately Dangerous to Life or Health (IDLH) No level has been established for the components or the product itself.

Effects of overexposure : Chronic toxicity Chronic inhalation exposure may cause impairment of lung function and permanent lung damage.

Mutagenicity Not mutagenic in five Salmonella strains with or without metabolic activation.

Carcinogenicity Not classified by IARC, OSHA, EPA.
Not included in NTP 12th Report on Carcinogens

Reproductive toxicity Sodium dichloroisocyanuric acid when given orally to pregnant mice from day 6 to day 15 of gestation, did not induce any significant teratogenic effects.

Section 12 Ecological information**Aquatic toxicity :**

- 96 Hour-LC50, Fish 0.22 mg/l (rainbow trout)
0.28 mg/l (bluegill sunfish)

- 48 hour-LC50, Daphnia magna 0.2 mg/l

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules

Revision date 5-15-15

Section 12 Ecological information (continued)

Avian toxicity:

- Oral LD50, Bobwhite quail	730 mg/kg
- Oral LD50, Mallard duck	3300 mg/kg
- Dietary LC50, Mallard duck	>10,000 ppm
- Dietary LC50, Bobwhite quail	>10,000 ppm

Persistence and degradability Not readily biodegradable. Rapidly hydrolyses in water into Cyanuric acid

Bioaccumulative potential Not expected to bioaccumulate

Mobility in soil The degradation product, Cyanuric acid, is weakly adsorbed to and highly mobile in all soils

Section 13 Disposal considerations

Waste disposal Care must be taken to prevent environmental contamination from the use of this material. Dispose of in a safe manner in accordance with local/national regulations.

Disposal of Packaging Empty containers should be disposed of in accordance with all applicable laws and regulations.

Section 14 Transport information

DOT Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN No. UN3077
PROPER SHIPPING NAME: Environmentally Hazardous Substance, Solid, n.o.s.
(Sodium dichloroisocyanurate dihydrate)
Class: 9 - Miscellaneous Hazardous Material
Label: 9
Marking: Marine Pollutant
Packing Group: III

Note: Certain shipping modes or package sizes may have exceptions from the transport regulations and may be classified as Consumer Commodity and Limited Quantity. The classification provided may not reflect those exceptions and may not apply to all shipping modes or package sizes.

IMDG UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
(Sodium Dichloroisocyanurate, dihydrate)
Class: 9 - Miscellaneous Dangerous Substances and Articles
Label: 9
Mark: MARINE POLLUTANT
Packing Group: III

ADR/RID UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
(Sodium Dichloroisocyanurate, dihydrate)
Class: 9 - Miscellaneous Dangerous Substances and Articles
Classification Code: M7
Hazard identification No: 90
Packing group: III
Marking: Environmentally hazardous substance

Product name Clear Spa¹⁰⁴ Spa Solutions Chlorinating Granules

Revision date 5-15-15

Section 14 Transport information (Continued)

ICAO/IATA UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Sodium Dichloroisocyanurate, dihydrate)
Class: 9
Hazard label(s): Miscellaneous
Packing group: III
Marking: Environmentally hazardous substance

Section 15 Regulatory information

EU Reported in EINECS

- Indication of danger Harmful, symbol required (Xn)
Dangerous for the environment, symbol required (N)

- R Phrases R 22: Harmful if swallowed.
R 31: Contact with acids liberates toxic gas.
Xi; R 36/37: Irritating to eyes and respiratory system.
R 50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

- S Phrases S 8: Keep container dry.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 41 :In case of fire and/or explosion do not breathe fumes.
S60: This material and its container must be disposed of as hazardous waste.
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

USA All the components of this substance are listed on or are exempt from the inventory

OSHA REGULATORY STATUS: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

FIFRA REGULATIONS: Registered pesticide under 40 CFR 152.10, Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

Australia Listed in AICS

China

- China inventory Listed

Japan ENCS no. (5)-1043
ISHL no. (5)-1043

New Zealand Inventory Listed in NZIoC

Philippines Listed in PICCS

Section 16 Other information**DATE OF PREPARATION****5-15-2015**

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