

SAFETY DATA SHEET

SECTION 1

MATERIAL NAME / IDENTIFIER

Stabilized Granular Chlorine

WHMIS: It is not regulated under WHMIS. It is regulated under the Pest Control Product Act (PCP).

Manufacturer's Name: CAPO INDUSTRIES LTD
Street Address: 1200 CORPORATE DRIVE
City: BURLINGTON, ONTARIO
Postal Code: L7L 5R6

Emergency Telephone: Canutec (613) 996-6666 (Collect)

Chemical Name: Sodium Dichloro-S-Triazinetrione
Chemical Family: Chlorinated Isocyanurate
Chemical Formula: $C_3N_3O_3Cl_2Na$
Trade Name & Synonyms: Dichloroisocyanuric Acid Sodium Salt
Molecular Weight: 220
Material Use: Pool water disinfectant

SECTION 2

HAZARDS IDENTIFICATION

GHS classification: Oxidizing solids, Category 2
Acute toxicity, Oral, Category 4
Skin corrosion/irritation, Category 1C
Serious eye damage/eye irritation, Category 1
Acute toxicity, Inhalation, Category 2
Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3
Hazardous to the aquatic environment, Acute hazard, Category 1
Hazardous to the aquatic environment, Long-term hazard, Category 1

Symbol(s)



Signal Word

Danger

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Hazard statements

H272 May intensify fire; oxidizer.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.
EUH031 Contact with acids liberates toxic gas.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
No smoking.
P220 Keep away from clothing and other combustible materials.
P221 Take any precaution to avoid mixing with combustibles.
P260 Do not breathe dust.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P284 In case of inadequate ventilation wear respiratory protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water or shower.
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.
P310 Immediately call a POISON CENTER or doctor.
P320 Specific treatment is urgent (see first aid on this label).
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use large amounts of water to extinguish.
P391 Collect spillage.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulations.

NFPA: 2 Health, 0 Fire, 2 Reactivity

HMIS: 3 Health, 0 Fire, 2 Reactivity

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SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS#	% Concentration
Sodium Dichloroisocyanuric Acid, Sodium Salt	2893-78-9	60 - 100

SECTION 4 FIRST AID MEASURES

Inhalation:	If inhalation of dust occurs and adverse effects result, remove to uncontaminated area. Evaluate ABC's (is Airway constricted, is Breathing occurring, and is blood Circulating) and treat symptomatically. Get medical attention immediately. There is no specific antidote, treat symptomatically.
Skin Contact:	Immediately flush contaminated areas with water. Remove contaminated clothing, jewelry and shoes. Wash contaminated areas with large amounts of water. Get medical attention immediately. Thoroughly clean and dry contaminated clothing before reuse.
Eye Contact:	Immediately flush contaminated eyes with a directed stream of water for as long as possible. Remove contact lenses, if present, then continue rinsing. Get medical attention immediately.
Ingestion:	If swallowed, do not induce vomiting. Give large amounts of water. If vomiting occurs spontaneously, keep airway clear. Give more water when vomiting stops. Never give anything by mouth to an unconscious or convulsive person. Get medical attention immediately.
Note to physicians	Treat as a corrosive substance. This material is more irritating to the skin and eyes in the presence of water. For prolonged exposures and significant exposures, consider delayed injury to exposed tissues. There is no antidote. Cyanuric acid is readily removed from the body via the renal system, and is not bioaccumulated. Treatment is supportive care. Follow normal parameters for airway, breathing, and circulation.

SECTION 5 FIRE – FIGHTING MEASURES

Hazardous Combustion Products:	Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, and phosgene.
Unusual Fire or Explosion Hazards:	Negligible fire hazard. If heated by outside source to temperatures above 240°C (464°F), this product will undergo decomposition with the evolution of noxious gases but no visible flame. Wet material may generate nitrogen trichloride, an explosion hazard.
Sensitivity to Mechanical Impact:	None
Rate of Burning:	Not applicable

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Explosive Power:	Not applicable
Sensitivity to Static Discharge:	None
Fire Extinguishing Media:	Flood with copious amounts of water only.
Instructions to the Fire Fighters:	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. Cool containers with water spray. 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.
Fire Fighting Protective Equipment:	Wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Leak And Spill Procedure:	Keep unnecessary and unprotected persons away. Isolate hazard area and deny entry. Do not get in eyes, on skin or on clothing. Do not breathe dust. Wear appropriate personal protective equipment. Keep out of water supplies and sewers. Do not add water to spilled material. 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 or 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.
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SECTION 7

HANDLING AND STORAGE

HANDLING

Handling Practices:	Avoid contact with skin, eyes and clothing. Avoid breathing dust and avoid creating dust. Wash hands thoroughly with soap and water after use. Wear appropriate personal protective equipment. Never add water to this product. Always add product to large quantities of water. Use clean, dry utensils. Do not add the product to any dispensing device containing residuals of other products.
Ventilation Requirements:	Local exhaust ventilation.

STORAGE

Ventilation Requirements:	Store in a cool, dry area.
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Storage Requirements: Keep away from incompatible materials. Do not allow water to get into containers.
Keep containers tightly closed when not in use.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Engineering Controls: Local exhaust ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Skin (Specify): Rubber gloves if skin contact is likely.
Eye (Specify): Safety glasses if skin contact is likely.
Respiratory (Specify): Use NIOSH/MSHA approved dust or vapour mask when airborne exposure limits are exceeded.
Other (Specify): Protective clothing if contact is likely. Wear disposable coveralls suitable for dust Exposure. Eye wash and shower stations close to work area.

SECTION 9 PHYSICAL DATA FOR MATERIAL

Physical State: Gas Liquid Solid X

Odour & Appearance: White, granular, chlorine odour.

Odour Threshold (ppm): Not applicable

Flammability: Yes No X

If Yes, Under Which Conditions?:

Auto Ignition Temperature (Celsius): Not applicable

Upper Explosion Limit (% By Volume): Not applicable

Lower Explosion Limit (% By Volume): Not applicable

Decomposition Temp (°C) 252°C (486°F)

Specific Gravity: 0.882 g/ml

Viscosity: Not applicable

Vapour Pressure (mm): <0.06 Pa @20°C

Vapour Density (Air-1): Not applicable

Flashpoint (°C) Not applicable

Evaporation Rate Not applicable

Boiling Point (°C): Not applicable

Freezing Point (°C): Not applicable

Solubility In Water (20°C): 24.3 g/100 g H₂O @25°C

% Volatile (By Weight) Not applicable

PH: 6 - 7 (1% solution)

Coefficient Of Water/Oil Distribution: Not available

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SECTION 10

STABILITY AND REACTIVITY

Chemical Stability:	Yes	<u>X</u>	No
If No, Under Which Conditions?:			
Incompatibility To Other Substances:	Yes	<u>X</u>	No
If So, Which Ones:	Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.		
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. Contact with acids liberates toxic gas.		
Hazardous Decomposition Products:	Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene.		

SECTION 11

TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS

Inhalation:	Exposure to the solid product or to free chlorine evolving from the product may cause irritation, redness of upper and lower airways, coughing, laryngospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.
Skin Contact:	Skin corrosion. Exposure to solid along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.
Eye Contact:	Serious eye damage. Exposure to eyes may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of the eye.
Ingestion:	Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.

CHRONIC HEALTH EFFECTS: None known

Other Health Effects: None known

LD 50 of Material (Specify Species and Routes): 1823 mg/kg, Oral (Rat), >2000 mg/kg, Dermal (Rabbit)

LC 50 of Material (Specify Species and Routes): 0.27 – 1.17 mg/l, Inhalation 4h (Rat)

Exposure (Limits): Not available

Irritancy of Material Severe skin and eye irritant.

Sensitization of Material None known

Specific Target Organ Toxicity (Single Exposure): Respiratory tract irritant

Synergistic Materials None known

Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity: None known

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SECTION 12

ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic Toxicity:

96 h LC50, Fish	0.13-0.36 mg/l (rainbow trout)
	0.25-1.0 mg/l (bluegill sunfish)
	1.21 mg/l (inland silversides)

Invertebrate Toxicity:

48 h LC50	0.196 mg/l (water flea)
96 h LC50	1.65 mg/l (mysid shrimp)

Avian Toxicity:

Oral LD50, Bobwhite quail	1732 mg/kg
Oral LD50, Mallard duck	1916 mg/kg
Dietary LD50, Mallard duck	>10000 ppm
Dietary LD50, Bobwhite quail	>10000 ppm

Environmental Fate

Biodegradability:	This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.
Bioaccumulative Potential:	This material hydrolyses in water liberating free available chlorine and cyanuric acid. These products are not bioaccumulative.
Mobility In Soil:	The degradation product, Cyanuric acid, is weakly adsorbed to and highly mobile in all soils.

SECTION 13

DISPOSAL CONSIDERATIONS

Waste Disposal:	Dispose dry material in accordance to all federal, provincial, and local regulations.
Safe Handling of Residues:	See above.
Disposal of Packaging:	Empty containers should be disposed in accordance to all federal, provincial, and local regulations.

SECTION 14

TRANSPORTATION INFORMATION

CANADIAN TDG ACT SHIPPING DESCRIPTION:

Proper shipping name:	Dichloroisocyanuric Acid Dry
Class:	5.1
Packing group:	II

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UN: 2465
Marking: Marine Pollutant

US DOT CLASSIFICATION (49CFR 172.101, 172.102):

Proper shipping name: Dichloroisocyanuric Acid Dry

Class: 5.1
Packing group: II
UN: 2465
Marking: Marine Pollutant

SECTION 15 REGULATORY INFORMATION

CANADA All components are listed on the DSL or the NDSL.

PCP This product is a registered pesticide.

USA All components of this substance are listed or exempt from the inventory. This product is registered under FIFRA.

SARA (311,312) This product is categorized as an acute health hazard, and fire and reactivity physical hazard.

Rhode Island and Pennsylvania Right-to-Know Hazardous Substances Lists: Listed.

California Prop 65, and Massachusetts Right-to-Know Hazardous Substances List: Not Listed.

New Jersey Right-to-Know Hazardous Substances List: 1694

INTERNATIONAL Not available

SECTION 16 OTHER INFORMATION

Prepared By (Group, Department, Etc.): Quality Control Telephone: (905) 332-6626

Preparation Date: January 1, 1996
Date Revised: November 30, 2016
Additional Notes Or References:

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