

# MATERIAL SAFETY DATA SHEET

## SECTION 1 MATERIAL NAME / IDENTIFIER

**CHLORINATING GRANULES**

**WHMIS: D2B**

**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 Dihydrate  
**Chemical Family:** Chlorinated Isocyanurate  
**Chemical Formula:**  $\text{NaCl}_2 (\text{NCO})_3 \cdot 2\text{H}_2\text{O}$   
**Trade Name & Synonyms:** Dichloroisocyanuric Acid Sodium Salt Dihydrate  
**Molecular Weight:** 256  
**Material Use:** Pool water disinfectant

## SECTION 2 HAZARDS IDENTIFICATION

**GHS classification:** H302 Acute toxicity, Oral, Category 4  
H315 Skin corrosion/irritation, Category 2  
H319 Serious eye damage/eye irritation, Category 2A  
H335 Specific target organ toxicity, Single exposure, Respiratory tract irritation, Category 3  
H410 Hazardous to the aquatic environment, Long-term hazard, Category 1  
EUH031 Contact with acids liberates toxic gas

**Symbol(s)**



**Signal Word**

Warning

**Hazard statements**

Harmful if swallowed. Causes skin and serious eye irritation. May cause respiratory irritation. Very toxic to aquatic life with long lasting effects. Contact with acids liberates toxic gas.

**Precautionary statements**

Do not ingest. If swallowed, seek medical attention immediately. Wear gloves and Safety glasses when handling. Wash hands thoroughly after use. Avoid breathing in

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dust/vapours. If inhaled, remove person to fresh air and seek medical attention. Use in a well ventilated area. Avoid release into the environment.

**NFPA: 2 Health, 0 Fire, 1 Reactivity**

**HMIS: 3 Health, 0 Fire, 1 Reactivity**

## SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredient	CAS#	% Concentration
Sodium Dichloroisocyanurate Dihydrate	51580-86-0	60 – 100

## SECTION 4 FIRST AID MEASURES

<b>Inhalation:</b>	Remove person to fresh air. Seek medical attention.
<b>Skin Contact:</b>	Wash hands thoroughly with soap and water. Should irritation persist, contact a physician.
<b>Eye Contact:</b>	Flush eyes with copious amounts of water for 15 minutes. Seek medical attention.
<b>Ingestion:</b>	Drink 2 or 3 glasses of water or milk. Do not induce vomiting. Seek medical attention.
<b>Note to physicians</b>	Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically and supportively.

## SECTION 5 FIRE – FIGHTING MEASURES

<b>Hazardous Combustion Products:</b>	Chlorine gas and traces of phosgene, carbon monoxide and nitrogen trichloride.
<b>Unusual Fire or Explosion Hazards:</b>	When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride and carbon monoxide.
<b>Sensitivity to Mechanical Impact:</b>	None
<b>Rate of Burning:</b>	Not applicable
<b>Explosive Power:</b>	Not applicable
<b>Sensitivity to Static Discharge:</b>	None
<b>Fire Extinguishing Media:</b>	Water only
<b>Instructions to the Fire Fighters:</b>	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.
<b>Fire Fighting Protective Equipment:</b>	Wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

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## SECTION 6

## ACCIDENTAL RELEASE MEASURES

**Leak And Spill Procedure:** Clean up spill immediately. Keep spilled material dry. Sweep up and place material in a clean, dry and labelled container.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

**Handling Practices:** Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after use.

**Ventilation Requirements:** Local exhaust ventilation.

### STORAGE

**Ventilation Requirements:** Store in a cool, dry area.

**Storage Requirements:** Do not store at temperatures above 60°C/140°F. 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. 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?:**

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<b>Auto Ignition Temperature (Celsius):</b>	Not applicable
<b>Upper Explosion Limit (% By Volume):</b>	Not applicable
<b>Lower Explosion Limit (% By Volume):</b>	Not applicable
<b>Decomposition Temp (°C)</b>	240 - 250°C
<b>Specific Gravity:</b>	2.03
<b>Viscosity:</b>	Not applicable
<b>Vapour Pressure (mm):</b>	Not applicable
<b>Vapour Density (Air-1):</b>	Not applicable
<b>Flashpoint (°C)</b>	Not applicable
<b>Evaporation Rate</b>	Not applicable
<b>Boiling Point (°C):</b>	Not applicable
<b>Freezing Point (°C):</b>	Not applicable
<b>Solubility In Water (20°C):</b>	30 g/100 g H <sub>2</sub> O @25°C
<b>% Volatile (By Weight)</b>	Not applicable
<b>PH:</b>	6.5 (1% solution)
<b>Coefficient Of Water/Oil Distribution:</b>	Not available

## SECTION 10 STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	<b>Yes</b>	<b>No</b>	<b><u>X</u></b>
<b>If No, Under Which Conditions?:</b>	Avoid contact with incompatible material and damp conditions.		
<b>Incompatibility To Other Substances:</b>	<b>Yes</b>	<b><u>X</u></b>	<b>No</b>
<b>If So, Which Ones:</b>	Easily oxidizable organic materials, ammonia, urea or similar nitrogen containing compounds, inorganic reducing compounds, calcium hypochlorite, alkalis and acids.		
<b>Conditions to Avoid:</b>	Heating above decomposition temperature. Do not package in paper or cardboard.		
<b>Hazardous Decomposition Products:</b>	Nitrogen trichloride, chlorine gas, traces of phosgene, and carbon monoxide.		

## SECTION 11 TOXICOLOGICAL INFORMATION

### ACUTE HEALTH EFFECTS

<b>Inhalation:</b>	Dust may cause eye, nose, throat and respiratory irritation.
<b>Skin Contact:</b>	Causes severe irritation and/or burns characterized by redness, swelling and scab formation.

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**Eye Contact:** Severe irritation and/or burns can occur. Contact may cause impairment of vision and corneal damage.

**Ingestion:** This product may be harmful if swallowed. Corrosive to mucous membranes.

**CHRONIC HEALTH EFFECTS:** Prolonged skin exposure may cause permanent damage. Chronic inhalation may cause impairment of lung function and permanent lung damage.

**Other Health Effects:** Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically and supportively.

**LD 50 of Material (Specify Species and Routes):** 1671 mg/kg, Oral (Rat), >5000 mg/kg, Dermal (Rat)

**LC 50 of Material (Specify Species and Routes):** Not available

**Exposure (Limits):** Chlorine – TWAEV – 1ppm, 3mg/m<sup>3</sup>, STEV – 3ppm, 9mg/m<sup>3</sup>

**Irritancy of Material** Strong irritant of skin, eyes, nose, throat and respiratory tract.

**Sensitization of Material** None known

**Synergistic Materials** None known

**Carcinogenicity, Mutagenicity, Reproductive Effects, Teratogenicity:** None known

## SECTION 12 ECOLOGICAL INFORMATION

### Ecotoxicity

#### **Aquatic Toxicity:**

**96 h LC50, Fish** 0.22 mg/l (rainbow trout)  
0.28 mg/l (bluegill sunfish)

**48 h LC50, Daphnia magna** 0.2 mg/l

#### **Avian Toxicity:**

**Oral LD50, Bobwhite quail** 730 mg/kg

**Oral LD50, Mallard duck** 3300 mg/kg

**Dietary LC50, Mallard duck** >10000 ppm

**Dietary LC50, Bobwhite quail** >10000 ppm

### Environmental Fate

**Biodegradability:** Not readily biodegradable. Rapidly hydrolyzes 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.

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## 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:** Not regulated for non bulk shipments.

**Bulk shipments:**

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s. (Sodium Dichloroisocyanurate, dehydrate)

**Class:** 9 – Miscellaneous Hazardous Material

**Label:** 9

**Packing group:** III

**UN:** 3077

**Marking:** Marine Pollutant

**US DOT CLASSIFICATION (49CFR 172.101, 172.102):** Not regulated for non bulk shipments.

**Bulk shipments:**

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s. (Sodium Dichloroisocyanurate, dehydrate)

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**Label:** 9

**Packing group:** III

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**Marking:** Marine Pollutant

**IMDG:**

**Proper shipping name:** Environmentally hazardous substance, solid, n.o.s. (Sodium Dichloroisocyanurate, dehydrate)

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**ICAO/IATA:**

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**Label:** 9

**Packing group:** III

**UN:** 3077

**Marking:** Environmentally hazardous substance

## SECTION 15 REGULATORY INFORMATION

**CANADA**

**WHMIS:** E

**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 immediate health hazard, and fire and reactivity physical hazard.

**Massachusetts and Pennsylvania Right-to-Know Hazardous Substances Lists:** Listed.

**California Prop 65** This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.

**Waste Classifications** If this product becomes a waste, it does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the characteristics of hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D.

**Workplace Classification** This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**INTERNATIONAL**

**EU** Reported in EINECS

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

**Australia, New Zealand Inventory, China Inventory, and Philippines** Listed

## SECTION 16 OTHER INFORMATION

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

**Preparation Date:** April 6, 2005

**Date Revised:** May 22, 2016

**Additional Notes Or References:**

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