



## SAFETY DATA SHEET

**Product name** FRESH & CLEAN® SWIMMING POOL SANITIZER 56

### SECTION 1 - IDENTIFICATION

Company Identification: Aqua Tri®  
17872 Mitchell N.  
Irvine, CA. 92614-6034  
(949)474-7707  
WWW.ALLCLEAR.COM

**Emergency Telephone** 1-800-654-6911, 24 Hours/Day, Seven days a week.  
Other times, call the poison control center 1-800-222-1222.

Product Identifier: **Sodium Dichloroisocyanurate Dihydrate**

Synonyms: Sodium dichloro-s-triazinetriene dihydrate, Dichlor dihydrate, 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1, 3-dichloro sodium salt dihydrate, Triclosene sodium dihydrate, SDCC dihydrate, NaDCC dihydrate, Dichloroisocyanuric acid sodium salt.

Product Use: Water, swimming pool and spa treatment.

Uses Advised Against: None identified. This is a pesticide product. Do not use in an application that is not included on its label.

### SECTION 2 – HAZARDS IDENTIFICATION

#### CLASSIFICATIONS:

Oxidizing solids (Category 2), H272

Acute toxicity, Inhalation (Category 2), H330

Acute toxicity, Oral (Category 4), H302

Skin corrosion (Category 1C), H314

Eye corrosion (Category 1), H318

Specific target organ toxicity – single exposure (Category 3), Respiratory system, H335

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

#### SIGNAL WORD: DANGER





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**HAZARD STATEMENTS:**

- May intensify fire; oxidizer
- May be harmful if inhaled
- Harmful if swallowed
- Causes severe skin burns and eye damage
- Causes serious eye damage
- May cause respiratory irritation
- Very toxic to aquatic life
- Very toxic to aquatic life with long lasting effects

**GHS - Precautionary Statement(s) - Prevention**

- Do not breathe dust, fume, gas, mist, vapors, or spray
- In case of inadequate ventilation, wear respiratory protection
- Wear protective gloves, protective clothing, eye, and face protection
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Keep away from heat
- Keep/Store away from clothing and other combustible materials
- Take any precaution to avoid mixing with combustibles

**GHS - Precautionary Statement(s) – Response**

**If in eyes:**

- Hold eye 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.

**If swallowed:**

- Call poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.  
Do not give anything by mouth to an unconscious person.

**If inhaled:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

**If on skin or clothing:**

- 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.

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**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.  
(see Section 4 of SDS or first aid information on this label)

**In case of fire:** Use large amounts of water to extinguish

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Substances: Active Ingredient: SODIUM DICHLOROISOCYANURATE,  
DIHYDRATE, 99%  
Inert Ingredients: 1.0%

Identification Numbers: CAS No. 51589-86-0  
EC No. 220-767-7  
Index No. 613-030-01-7

Mixtures: This product is not a mixture.

## SECTION 4 – FIRST-AID MEASURES

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin Contact:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

## SECTION 5 – FIRE-FIGHTING MEASURES

**Extinguishing Media:** USE LARGE QUANTITIES OF WATER, ONLY.

**Unsuitable Extinguishing Media:** Dry chemicals, ammonia-based powder salts, carbon dioxide and halogenated extinguishing agents.

**Special Hazards Arising from the Substance or Mixture:** This product is not combustible; however, contact with combustible materials may cause a fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Advice For Firefighter:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Strong



oxidizer.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### **Personal Precautions, Protective Equipment and Emergency Procedures**

Avoid contact with skin, eyes and clothing. Avoid the generation of dust. Ensure adequate ventilation.

### **Environmental Precautions**

This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### **Methods and Material for Containment and clean up**

Do not add water to spilled material. Do not use floor-sweeping compounds to clean up spill. Use clean, dedicated equipment to pick up material. Avoid contact with other chemicals. Do not seal the waste container. Do not transport waste container. The material should be neutralized on-site to a non-oxidizing state.

## SECTION 7 – HANDLING AND STORAGE

### **Precautions for Safe Handling:**

Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Avoid contact with clothing and other combustible materials. Do not get on skin or in eyes. Avoid ingestion and inhalation. Wash thoroughly after handling this product. Wear personal protective equipment. Never add water to this product, always add this product to water.

### **Safe Storage Conditions:**

Store this product in a cool, dry location. Keep away from heat, sparks, and flame. Do not store near combustible materials. Keep away from acids and other incompatible substances.

### **Incompatible Materials to Avoid:**

Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### **Control Parameters:**

Regulatory Exposure Limits: **NONE**

### **Appropriate Engineering Controls:**

Use only in well-ventilated areas.

### **Respiratory Protection:**

A NIOSH approved respirator with N95 (dust, fume, mist) cartridges may be permissible under certain conditions where airborne concentrations are expected to exceed exposure limits. The added

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protection of a full face respirator is required when visible dusty conditions are encountered and eye irritation may occur. Acid gas cartridges with N95 filters are required when fumes or vapor may be generated.

Eye Protection:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wear safety glasses with side shields. Wear chemical safety goggles with a face shield to protect against eye and skin contact when appropriate.
Skin and Body Protection:	Wear appropriate clothing
Hand Protection:	Wear appropriate chemical-resistant gloves.
Protective Material Types:	Butyl rubber, natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC), Tyvek®.

## SECTION 9 – PHYSICAL and CHEMICAL PROPERTIES

Physical State:	Solid crystals
Appearance:	White
Odor:	Slight chlorine odor
pH:	6 – 7 @ 25 deg C (1% solution)
Viscosity	N/A
Boiling Point	N/A
Freezing Point:	N/A
Melting Point:	Decomposes without melting @ 252 deg C
Flash Point:	N/A
Decomposition Temperature:	486 deg F (252 deg C) – dehydrates @ 104-212 deg F (40-100 deg C)
Solubility:	26.5 g/100ml (25 deg C)
Specific Gravity/Rel. Density:	1.95 g/ml @ 25 deg C
Molecular Formula:	C <sub>3</sub> N <sub>3</sub> O <sub>3</sub> Cl <sub>2</sub> Na.2H <sub>2</sub> O
Molecular Weight:	256
Density	N/A
Bulk Density	50-60 lbs.ft <sup>3</sup> (loose)

## SECTION 10 – STABILITY and REACTIVITY

Reactivity:	Not reactive under normal temperatures and pressures.
Chemical Stability:	Stable at normal temperatures and pressures.
Possibility of Hazardous Reactions:	Keep product dry. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic materials. Contact with acids liberates toxic gases.

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Conditions to Avoid:	Protect against humid conditions.
Incompatible Materials to avoid:	Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds.
Hazardous Decomposition Products:	Chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon phosgene.
Hazardous Polymerization:	Will not occur.

## SECTION 11 – TOXICOLOGICAL INFORMATION

### Irritation Data:

Primary Skin Irritation:	Severe Irritation, Corrosive (rabbit, 24 hr.)
Primary Eye Irritation:	Severe Irritation, Corrosive (rabbit, 24 hr.)

### Toxicity Data:

LD50 Oral	1,823 mg/kg (rat)
LD50 Dermal	>2,000 mg/kg (rabbit)
LC50 Inhalation	0.27-1.17 mg/L (4 hr.-rat)

### Component Toxicity Data:

LD50 Oral	Sodium dichloroisocyanurate dihydrate (CAS No. 51580-86-0) 735 mg/kg (rat)
LD50 Dermal	2,000 mg/kg (rabbit), 5,000 mg/kg (rat)
LC50 Inhalation	50 mg/L (1 hr.-rat)

### Potential Health Effects:

**Eye Contact:** Eye exposures may cause burns to the eye-lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to the internal contents of eye.

### Skin Contact:

Exposure to solid along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns. Dry material is less irritating than wet material. This material is not a skin sensitizer based on studies with guinea pigs.

### Inhalation:

This material in the form as sold is not expected to produce respiratory effects. Particles of respirable size 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. Exposure to the solid product or to free chlorine evolving from the product may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.

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Ingestion:	Exposure by ingestion may cause irritation, nausea, and vomiting. May cause local tissue damage to epiglottis, mucus membranes of the mouth, esophagus and stomach such as burning, inflammation, local ulceration, and may cause gastrointestinal bleeding.
Chronic Effects:	None identified for the parent chemical. Based on animal studies, exposure to concentrations of monosodium cyanurate at the solubility limit may cause cardiovascular, kidney and urinary bladder effects.
Signs and Symptoms of Exposure:	
Breathing (Inhalation):	Exposure to the solid product or to free chlorine evolving from the product may cause irritation, redness of upper and lower airways, coughing, laryngeospasm and edema, shortness of breath, bronchoconstriction, and possible pulmonary edema. The pulmonary edema may develop several hours after a severe acute exposure.
Skin Contact:	Exposure to solid along with moisture may cause redness, irritation, burning sensation, swelling, blister formation, first, second, or third degree burns.
Eye Contact:	Eye exposures may cause irritation and burns to the eye lids, conjunctivitis, corneal edema, and corneal burn. Significant and prolonged contact may cause damage to internal contents of the eye.
Swallowing (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.  Toxicity: Monosodium cyanurate was administered via drinking water to rats for 104 weeks at concentrations of 0, 400, 1200, 2400, and 5375 ppm (solubility limit). No compound-related effects on body weights, clinical signs of toxicity or food or water consumption were noted during the study. An increased incidence of gross lesions in the urinary tract, calculi in the kidney and lesions in the heart were observed in males receiving the highest dose level of 5375 ppm (solubility limit). The health effects seen in this study were due to precipitation of the test substance in the urinary tract when the test substance was fed at the solubility limit. Adverse health effects were not seen at lower doses where precipitation did not occur.
Interaction with Other Chemicals which Enhance Toxicity:	None known.
GHS Health Hazards:	
GHS: Acute Toxicity – Oral:	Category 4 – Harmful if swallowed
GHS: Acute Toxicity – Dermal:	Not acutely toxic by dermal exposure
GHS: Acute Toxicity – Inhalation:	Category 2 – Fatal if inhaled
Skin Absorbent / Dermal Route?	No.



GHS: Contact Hazard – Skin:	Category 1C – Causes severe skin burns and eye damage.
GHS Contact Hazard – Eye:	Category 1 – Causes serious eye damage
GHS: Carcinogenicity:	Not classified as a carcinogen by NTP, IARC or OSHA
Specific Target Organ Toxicity: (single exposure)	Category 3 – Respiratory Tract Irritation
Mutagenic Data:	Not classified as a mutagen per GSH criteria.
Reproductive Toxicity:	Not classified as reproductive toxin per GHS criteria.
Other Hazards:	Contact with acids liberates toxic gases.

## SECTION 12 – ECOLOGICAL INFORMATION

### Ecotoxicity Data:

#### Fish Toxicity:

LC50 Bluegill sunfish:	0.25-1.0 mg/L (96 hour)
LC50 Rainbow trout:	0.13-0.36 mg/L (96 hour)
LC50 Inland silversides	1.21 mg/L (96 hour)

#### Invertebrate Toxicity:

LC50 Water flea	0.196 mg/L (48 hour)
LC50 Mysid shrimp	1.65 mg/L (96 hour)

#### Other Toxicity:

LD50 Mallard duck (oral)	1,916 mg/kg
LD50 N. Bobwhite Quail (oral)	1,732 mg/kg
LD50 Mallard duck (diet)	>10,000 ppm
LD50 N. Bobwhite Quail (diet)	>10,000 ppm

#### Fate and Transport:

Biodegradation: This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.

#### Persistence:

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

#### Bioconcentration:

This material hydrolyses in water liberating free available chlorine and cyanuric acid. These products are not bioaccumulative.





Additional Ecological Information: This pesticide is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other water unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### SECTION 13 – DISPOSAL CONSIDERATIONS

Use or reuse if possible. This material is a registered pesticide. Dispose in accordance with all applicable regulations. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible material could cause a reaction and fire. DO NOT transport wet or damp material. Damp material should be neutralized to a non-oxidizing state on site. See product label for container disposal information.

### SECTION 14 – TRANSPORT INFORMATION

Proper shipping name:	Environmentally Hazardous Substance, Solid, n.o.s. (Sodium dichloroisocyanurate dihydrate), Marine Pollutant
UN Number	UN No. 3077
Hazard Class or Division	9
Packing Group	III
Labeling Requirements	9, Marine Pollutant
Marine Pollutant:	Sodium dichloroisocyanurate dihydrate

### SECTION 15 – REGULATORY INFORMATION

U.S. Regulations:	
OSHA Regulatory Status:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
CERCLA Sections 102a/103 Hazardous Substances (40 CFR 302.4)	Not regulated
SARA EHS Chemical	Not regulated
EPCRA Sections 311/312	Fire Hazard, Reactive Hazard, Acute Health Hazard
Hazard Categories (40 CFR 372.10)	
EPCRA Section 313 (40 CFR 372.65)	Not regulated



OSHA Process Safety  
(PSM) (29 CFR 1910.119)

Not regulated

FIFRA Regulations

Registered pesticide under 40 CFR, 152,10, Federal Insecticide,  
Fungicide and Rodenticide Act (FIFRA)

Canadian Regulations:

This product is classified in accordance with the hazard criteria of the  
Controlled Products Regulations and the SDS contains all the  
information required by the Controlled Products Regulations.

PCP Registration:

This product is registered as a pesticide in Canada.

## SECTION 16 – OTHER INFORMATION

Prepared by:

WLS Associates (consulting services)

Revision Date:

Version 2, June 1, 2015

HMIS Rating:

Health 3      Flammability 0      Reactivity 1

NFPA Rating:

Health 2      Flammability 0      Reactivity 1

### **DISCLAIMER**

**The above information is believed to be correct; but, does not purport to be inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aqua Tri®, shall not be held liable for any damages resulting from handling or from contact with the above product.**