

## Safety Data Sheet

### 1. IDENTIFICATION

#### Sodium DiChloroIsoCyanurate (SDIC)

**Use:** Intended for disinfectants, sanitizers, fungicides, bactericides and algacides for pools, spas, hot tubs, air washers and evaporative condensers, food contact surfaces, laundry and egg sanitizing

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Emergency Information

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### 2. HAZARD(S) IDENTIFICATION

**GHS Classification:** GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
Oxidizing solids (Category 2), H272  
Acute toxicity, Oral (Category 4), H302  
Skin corrosion (Category 1B), H314  
Serious eye irritation (Category 2), H319  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

**Label Element:**



**Signal Word:** **Danger**

**Hazard Statement:** May intensify fire; oxidizer.  
Harmful if swallowed.

Causes serious eye irritation  
May cause respiratory irritation.  
Very toxic to aquatic life with long lasting effects.

**Precautionary Statements**

- Prevention:** Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Use only outdoors or in a well-ventilated area. Do not breathe mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Avoid release to the environment
  
- Response:** In case of fire: Use water for extinction. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor. If exposed: Call a poison center/doctor. Collect spillage.
  
- Storage:** Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Chemical Entity             | CAS Number               | Percentage (%) |
|-----------------------------|--------------------------|----------------|
| Sodium dichloroisocyanurate | 51580-86-0,<br>2893-78-9 | 99-100         |
| Sodium Chloride             | 7647-14-5                | 0-1            |

**4. FIRST-AID MEASURES**

- Eyes:** Immediately flush with plenty of lukewarm water for up to 20 minutes. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Take care not to raise contaminated water into affected eye. Get medical attention immediately.
  
- Skin:** Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Wash contaminated clothing before reuse.
  
- Ingestion:** Never give anything by mouth if victim is rapidly losing consciousness, or if unconscious or convulsing. Have victim rinse mouth thorough with water. Have victim drink one cup (240-300ml 8-10 oz) to dilute material in stomach. Do not induce vomiting. If vomiting occurs naturally, rinse mouth and repeat administration of

water. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped cardiopulmonary resuscitation (CPR) immediately. Get medical attention immediately.

**Inhalation:** Remove source of contamination or move victim to fresh air. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped start CPR (cardiopulmonary resuscitation). Get medical attention immediately.

## 5. FIRE-FIGHTING MEASURES

- Extinguishing Media:** Do not use dry chemical extinguisher containing ammonia compounds.
- Exposure Hazard:** When heated to decomposition, may release poisonous and corrosive fumes of nitrogen trichloride, chlorine and CO.
- Protective Equipment:** Wear full protective clothing and self-contained breathing apparatus exposed to vapors or products of combustion.
- Advice for Firefighters:** 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.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal Precaution:** Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
- Environmental Precaution:** **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.
- Clean up Methods:** 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.

## 7. HANDLING and STORAGE

- Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The

potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – “No Smoking”. Keep away from heat and sources of ignition.

**Storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from foodstuffs. Keep dry - reacts with water, may lead to drum rupture. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for spills.

**Incompatible Material:** Incompatible with combustible materials , ammonium salts , nitrogenous materials , acids , water , reducing agents , metal powders .

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Personal Protection:** Avoid contact, wear gloves, safety boots, safety glasses and overalls
- Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Eye Protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)
- Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Other Personal Protection Data:** Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Hygiene Measures:** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL and CHEMICAL PROPERTIES

- Physical State: Solid granules
- Appearance: White, slight chlorine odor.
- Odor threshold: Not available
- pH: 6.5 (1% solution)

|                               |               |
|-------------------------------|---------------|
| Specific gravity:             | Not available |
| Melting point/freezing point: | ca. 250       |
| Vapor Pressure:               | Not available |
| Vapor Density:                | Not available |
| Evaporation Rate:             | Not available |

## 10. STABILITY and REACTIVITY

|                                 |  |
|---------------------------------|--|
| <b>Reactivity:</b>              | Oxidising, avoid contact with reducing agents. Reacts with reducing agents. Contact with acids liberates toxic gas.  |
| <b>Chemical Stability:</b>      | Powerful oxidizing agent. Sodium dichloroisocyanurate reacts with water and acids evolving toxic chlorine gas and in the presence of small amounts of water, the explosive gas nitrogen trichloride. Decomposes in alkaline conditions evolving carbon dioxide, nitrogen and chloramine gases. Slightly hygroscopic. |
| <b>Conditions to Avoid:</b>     | Avoid exposure to moisture. Avoid exposure to heat. Avoid contact with other chemicals. Avoid contact with foodstuffs.   |
| <b>Materials to Avoid:</b>      | Incompatible with combustible materials, ammonium salts, nitrogenous material, acids, water, reducing agents, metal powders.   |
| <b>Hazardous Decomposition:</b> | Chlorine. Oxides of nitrogen. Oxides of carbon. Hydrogen chloride. Sodium oxide.   |

## 11. TOXICOLOGICAL INFORMATION

|   |  |
|---|--|
| <b>Acute toxicity:</b>                                |  |
| -Rat, oral LD50                                       | 1671 mg/kg   |
| -Rat dermal LD50                                      | >5000 mg/kg  |
| <b>Eye irritation</b>                                 | Severe irritant  |
| <b>Dermal irritation</b>                              | Severe irritant  |
| <b>Immediately Dangerous to Life or Health (IDLH)</b> | No level has been established for the components or the product itself.          |
| <b>Mutagenicity</b>                                   | Not mutagenic in five salmonella strains with or without metabolic activation.   |
| <b>Carcinogenity</b>                                  | Not classified by IARC, OSHA, EPA<br>Not included in NTP11 Report on Carcinogens |
| <b>Reproductive toxicity</b>                          | Sodium dichloroisocyanurate acid when given orally to                            |

**Chronic toxicity**

pregnant mice from day 6 to day 15 of gestation, did not induce any significant teratogenic effects.

Chronic inhalation exposure may cause impairment of lung function and permanent lung damage. In the experiment with drinking water from 28 days, extended to 59 days (rat: NOAEL = 115 mg/kg lich.day)

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Avoid contaminating waterways.

**Environmental fate:**

**Mobility:** Not available.

**Biodegradation:** Not available.

**Bioaccumulation:** Not available.

**Physical / Chemical:**

**Hydrolysis:** Not available.

**Photolysis:** Not available.

**Additional information:** Not available.

## 13. DISPOSAL CONSIDERATION

**Disposal of wastes:** Refer to Waste Management Authority. Dispose of material through a licensed waste contractor. Add sodium dichloroisocyanurate into dilute solution of sodium hydroxide or soda ash with stirring gradually and neutralize that solution with reduction agents such as sodium sulfite and sodium thiosulfate. Adjust pH with sulfuric acid or hydrochloric acid to make neutral solution and dispose..

**Contaminated Packaging:** Since empty containers retain product residue, follow label warnings even after container is emptied.

**Clean up:** Do not touch spilled material. Prevent material from entering sewers or confined place. Shovel into clean, dry, labeled containers. Flush area with water. Contaminated materials may be dissolved in water, then treated with a reducing agent such as sodium sulfite. Care should be taken while handling contaminated material due to fire risk.

## 14. TRANSPORT INFORMATION

**DOT (Department of Transportation)**

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS  
Hazard Class: 5.1 Oxidizing Agent  
UN/NA Number: UN2465  
Packaging Group: II  
Label Requirements: Oxidizer  
Reportable Quantity (RQ): None

#### **Marine Transport**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS  
Hazard Class: 5.1 Oxidizing Agent  
UN/NA Number: UN2465  
Packaging Group: II  
Label Requirements: Oxidizer  
Reportable Quantity (RQ): None

#### **Air Transport**

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

Proper Shipping Name: DICHLOROISOCYANURIC ACID SALTS  
Hazard Class: 5.1 Oxidizing Agent  
UN/NA Number: UN2465  
Packaging Group: II  
Label Requirements: Oxidizer  
Reportable Quantity (RQ): None

### **15. REGULATORY INFORMATION**

Classification: This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

#### **Hazard Statement(s):**

**H272** May intensify fire; oxidizer.

**H302** Harmful if swallowed.

**H319** Causes serious eye irritation.

**H335** May cause respiratory irritation.

**H410** Very toxic to aquatic life with long lasting effects.

**Poisons Schedule (SUSMP):** None allocated.

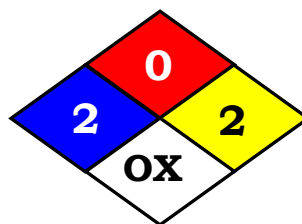
This material is listed on the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

### HMIS

|                            |          |
|----------------------------|----------|
| <b>HEALTH</b>              | <b>2</b> |
| <b>FLAMMABILITY</b>        | <b>0</b> |
| <b>REACTIVITY</b>          | <b>2</b> |
| <b>PERSONAL PROTECTION</b> | <b>X</b> |

### NFPA



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.