

# BALLAST WATER DISINFECTANT SDIC

Part No. RXSOL-31-3114-025 — Generated 06 Oct 2026

## 1. Product and Company Identification

|                                 |                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Product Name                    | DI CHLOR SDIC                                                                                                            |
| Part Number                     | RXSOL-31-3114-025                                                                                                        |
| Chemical Name                   | Sodium dichloroisocyanurate dehydrate                                                                                    |
| Synonyms                        | Sodium dichlor;; Sodium dichloroisocyanurate dihydrate;<br>Sodium Dichloro-S-Triazinetrione Dihydrate; Troclosene sodium |
| Company Details:                |                                                                                                                          |
| RX MARINE INTERNATIONAL         |                                                                                                                          |
| 105, A wing , BSEL , TECH PARK. |                                                                                                                          |
| VASHI ,NEW BOMBAY 400703 INDIA  |                                                                                                                          |
| Stock Point :                   | Mumbai, Kandla, Kolkata, Chennai, Vizag, Fujairah, Muscat, Nairobi                                                       |
| Phone                           | +91 22 2087 1200 / 1300 / 1400                                                                                           |
| Fax                             | +91 22 27612100 :::AOH :0091 9821214367                                                                                  |
| Email                           | <a href="mailto:123@rxmarine.com">123@rxmarine.com</a>                                                                   |
| Website                         | <a href="http://www.rxmarine.com">www.rxmarine.com</a>                                                                   |

## 2. Composition / informationon ingredients

| Name of Substance                     | Cas Number | EC Number | Wight % |
|---------------------------------------|------------|-----------|---------|
| Sodium dichloroisocyanurate dehydrate | 51580-86-0 | 220-767-7 | 99-100% |
| Sodium chloride                       | 7647-14-5  | 231-593-8 | 0-1%    |

## 3. Hazards Identification

|                                 |                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signal Word                     | Warning                                                                                                                                                                                                                                                                                                                                                                           |
| Classification of the chemical: | Oxidising solids - Category 2<br>Acute Oral Toxicity - Category 4<br>Eye Irritation - Category 2A<br>Specific target organ toxicity (single exposure) - Category 3<br>The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:<br>Acute Aquatic Toxicity - Category 1<br>Chronic Aquatic Toxicity - Category 1 |
| Hazard Statements               | H272 May intensify fire; oxidizer.<br>H302 Harmful if swallowed.<br>H319 Causes serious eye irritation.<br>H335 May cause respiratory irritation.<br>H410 Very toxic to aquatic life with long lasting effects                                                                                                                                                                    |

|                                     |                                                                                                                                                 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Precautionary statements prevention | P210 Keep away from heat. No smoking.                                                                                                           |
|                                     | P220 Keep and store away from clothing, incompatible materials, combustible materials.                                                          |
|                                     | P221 Take any precaution to avoid mixing with combustibles / incompatible materials.                                                            |
|                                     | P261 Avoid breathing dust / fume / gas / mist / vapours / spray.                                                                                |
|                                     | P264 Wash hands thoroughly after handling.                                                                                                      |
|                                     | P270 Do not eat, drink or smoke when using this product.                                                                                        |
|                                     | P280 Wear protective gloves / protective clothing / eye protection / face protection.                                                           |
|                                     | P285 In case of inadequate ventilation wear respiratory protection.                                                                             |
|                                     | P273 Avoid release to the environment..                                                                                                         |
|                                     | P370 In case of fire:                                                                                                                           |
| Precautionary statements response   | P378 Use water spray (large quantities) to extinguish.                                                                                          |
|                                     | P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.                                                            |
|                                     | P330 Rinse mouth.                                                                                                                               |
|                                     | 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/physician.                                                                                      |
|                                     | P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                            |
|                                     | P312 Call a POISON CENTER or doctor/physician if you feel unwell.                                                                               |
|                                     | P391 Collect spillage.                                                                                                                          |

## 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.                                                                                                   |
| Notes to Physician | Treat symptomatically. Delayed effects from exposure to chlorine (decomposition product) can include shortness of breath, severe headache, pulmonary oedema and pneumonia.                     |

## 5. Fire-fighting Measures

|                                    |                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable Extinguishing Media       | Water spray (large quantities).                                                                                                                                                                                                                                                                                                             |
| Unsuitable Extinguishing Media     | DO NOT USE the following as extinguishing media: Dry agent (carbon dioxide, dry chemical powder).                                                                                                                                                                                                                                           |
| 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. |
| Protective Equipment               | Use personal protective equipment.                                                                                                                                                                                                                                                                                                          |

## 6. Accidental Release Measures

|                          |                                                                                                                                                                                                                |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Spillage                 | Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...).                                                                                      |
| Personal Protection      | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8. |
| Environmental Precaution | Do not allow product to reach sewage system or any water course. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.   |
| Methods for cleaning     | Wipe up the spilled product and collect it in a suitable container for disposal. Always control the contaminated product on active chlorine .                                                                  |

## 7. Handling and Storage

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling                               | Keep away from heat. Keep away from sources of ignition. Keep away from combustible material.. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals |
| Storage                                | Strong Oxidizer. Moisture Sensitive. Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalies, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers.<br>Do not store above 23°C (73.4°F).                                                                                                                                                                                                                                                                                                      |
| Advice on general occupational hygiene | Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## 8. Exposure controls and personal protection

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Engineering Control      | Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.                                                                                                                         |
| Personal Protection      | Eye/face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.<br>Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection : Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Other Protection Measure | Handle in accordance with good industrial hygiene and safety practice.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Exposure Limit           | This product does not contain any components that have regulatory occupational exposure limits (OELs) established.                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



Gloves



Suit

## 9. Physical and chemical properties

|                           |                                                                                    |
|---------------------------|------------------------------------------------------------------------------------|
| Form                      | Solid, Granular                                                                    |
| Colour                    | White                                                                              |
| Odour                     | Slight Chlorine                                                                    |
| Odor Threshold            | Not Applicable                                                                     |
| pH                        | 6 -7                                                                               |
| Melting Point             | 245 °C (decomposition)                                                             |
| Boiling Point             | Not Applicable                                                                     |
| Flash Point               | Not Applicable                                                                     |
| Evaporation Rate          | Not Applicable                                                                     |
| Flammability (solid, gas) | No Data Available                                                                  |
| Explosive limits          | No Data Available                                                                  |
| Vapour pressure           | No Data Available                                                                  |
| Vapour Density            | No Data Available                                                                  |
| Specific Gravity          | 1.95 g/cm <sup>3</sup> at 20 °C                                                    |
| Partition coefficient     | No data available                                                                  |
| Explosive properties      | None                                                                               |
| Solubility                | Soluble in water 30 g/l at 20 °C                                                   |
| Molecular Formula         | C <sub>3</sub> Cl <sub>2</sub> N <sub>3</sub> NaO <sub>3</sub> · 2H <sub>2</sub> O |
| Molecular Weight          | 256 g/mol                                                                          |

## 10. Stability and reactivity

|                                    |                                                                                                                                                                                                                                                 |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | Yes.                                                                                                                                                                                                                                            |
| Stability                          | Oxidizer: Contact with combustible/organic material may cause fire, Moisture sensitive, Risk of explosion by shock, friction, fire or other sources of ignition.                                                                                |
| Possibility of hazardous reactions | 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 polymerization will not occur. |
| Conditions to avoid                | Incompatible products. Excess heat. Combustible material. Avoid dust formation. Exposure to moist air or water. Ignition sources - heat, sparks and open flames. Do not subject to grinding/shock/friction. Heat, flames and sparks.            |
| Incompatible materials             | Strong oxidizing agents. Strong bases. Acids.                                                                                                                                                                                                   |
| Hazardous Polymerization           | Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Nitrogen oxides (NO <sub>x</sub> ).                                                                                                                                                    |

## 11. Toxicological information

|                    |                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------|
| Route Of Entry     | Inhalation. Ingestion.                                                                                 |
| Toxicity to Animal | Acute toxicity :<br>-Rat, oral LD <sub>50</sub> 1671 mg/kg<br>-Rat dermal LD <sub>50</sub> >5000 mg/kg |
| Eye irritation     | Severe irritant                                                                                        |
| Dermal irritation  | Severe irritant                                                                                        |
| Mutagenicity       | Not mutagenic in five salmonella strains with or without metabolic activation.                         |

|                       |                                                                                                                                                                                                        |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Carcinogenity         | Not classified by IARC, OSHA, EPA<br>Not included in NTP11 Report on Carcinogens                                                                                                                       |
| Reproductive toxicity | Sodium dichloroisocyanurate acid when given orally to pregnant mice from day 6 to day 15 of gestation, did not induce any significant teratogenic effects.                                             |
| Chronic toxicity      | 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

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eco Toxicity                       | <p>The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p> <p>Fish Toxicity:<br/> LC50 Bluegill sunfish: 0.25-1.0 mg/L (96 hour)<br/> LC50 Rainbow trout: 0.13-0.36 mg/L (96 hour)<br/> LC50 Inland silversides: 1.21 mg/L (96 hour)</p> <p>Invertebrate Toxicity:<br/> LC50 Water flea: 0.196 mg/L (48 hour)<br/> LC50 Mysid shrimp: 1.65 mg/L (96 hour)</p> <p>Other Toxicity:<br/> LD50 Mallard duck (oral): 1,916 mg/kg<br/> LD50 N. Bobwhite Quail (oral): 1,732 mg/kg<br/> LD50 Mallard duck (diet): &gt;10,000 ppm<br/> LD50 N. Bobwhite Quail (diet): &gt;10,000 ppm</p> |
| COD and BOD 5                      | Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Products Biodegradation:           | This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mobility in soil                   | No Information available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Results of PBT and vPvB assessment | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Other adverse effects              | Henry constant : Transition from water solution into the atmosphere is not to be expected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## 13. Disposal considerations

|                        |                                                                                                                                                                                                                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste treatment Method | Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Use or reuse if possible. This material is a registered pesticide. May be subject to disposal regulations. |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 14. Transport information

|                      |                                                                                   |
|----------------------|-----------------------------------------------------------------------------------|
| DOT                  |                                                                                   |
| UN Number            | UN3307                                                                            |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate) |
| Hazard Class         | 9                                                                                 |
| Packing group        | III                                                                               |

## Environmental hazards

### TDG

|                      |        |                                                                                   |
|----------------------|--------|-----------------------------------------------------------------------------------|
| UN                   | Number | UN3307                                                                            |
| Proper shipping name |        | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate) |
| Hazard Class         |        | 9                                                                                 |
| Packing group        |        | III                                                                               |

### IATA

|                      |        |                                                                                   |
|----------------------|--------|-----------------------------------------------------------------------------------|
| UN                   | Number | UN3307                                                                            |
| Proper shipping name |        | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate) |
| Hazard Class         |        | 9                                                                                 |
| Packing group        |        | III                                                                               |

### MDG/IMO

|                       |        |                                                                                   |
|-----------------------|--------|-----------------------------------------------------------------------------------|
| UN                    | Number | UN3307                                                                            |
| Proper shipping name  |        | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (troclosene sodium, dihydrate) |
| Hazard Class          |        | 9                                                                                 |
| Packing group         |        | III                                                                               |
| IMDG Marine pollutant |        | yes                                                                               |

|                     |                                                                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Further information | EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 15. Regulatory information

|                                              |                                                                                                                                                                                                                        |
|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety, health and environmental regulations | This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.                                                                                                                       |
| National legislation                         | Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.<br>P8 OXIDISING LIQUIDS AND SOLIDS<br>E1 ENVIRONMENTAL HAZARDS |
| Other regulations                            | Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.        |
| Chemical Safety Assessment                   | For this product a chemical safety assessment was not carried out                                                                                                                                                      |

## 16. Other information

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### Other Information

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