## 1. Product and Company Identifaction

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Product Name DI CHLOR SDICSodium Dichlorocynurate Granules

Part Number RXSOL-23-3021-025

Chemical Name Sodium dichloroisocyanurate dehydrate

Synonyms Sodium dichlor;; Sodium dichloroisocyanurate dihydrate:

Sodium Dichloro-S-Triazinetrione Dihydrate; Troclosene sodium

Company Details:

RX MARINE INTERNATIONAL 105, A wing , BSEL , TECH PARK. VASHI ,NEW BOMBAY 400703 INDIA

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## 2. Composition / Information on ingredients

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Name of	Substance	Cas Number	EC Number	Wight %
Sodium dich dehydrate	nloroisocyanur	ate 51580-86-0	220-767-7	99-100%
Sodium chlo	oride	7647-14-5	231-593-8	0-1%

#### 3. Hazards Identification

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Signal Word Warning

Classification of the chemical: Oxidising solids - Category 2

Acute Oral Toxicity - Category 4 Eye Irritation - Category 2A

Specific target organ toxicity (single exposure) - Category  ${\bf 3}$ 

The following health/environmental hazard categories fall outside the

scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 1 Chronic Aquatic Toxicity - Category 1 H272 May intensify fire; oxidizer.

Hazard Statements H272 May intensify fire; oxidize

H302 Harmful if swallowed.H319 Causes serious eye irritation.H335 May cause respiratory irritation.

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..

Precautionary statements response P370 In case of fire:

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

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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 guiet 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

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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.

Cool containers with water spray. Fire fighters should wear full protective Fire Fighting Procedure:

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.

Use personal protective equipment. Protective Equipment

#### 6. Accidental Release Measures

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Oxidizing material. Stop leak if without risk. Avoid contact with a Spillage combustible material (wood, paper, oil, clothing...).

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.

Personal Protection

**Environmental Precaution** 

Methods for cleaning

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.

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

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Handling

Storage

Advice on general occupational hygiene

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

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.

Do not store above 23°C (73.4°F).

Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

## 8. Exposure controls and personal protection

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**Engineering Control** 

Personal Protection

Other Protection Measure Exposure Limit



Gloves Suit

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially inconfined 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.

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. 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.

Handle in accordance with good industrial hygiene and safety practice.

This product does not contain any components that have regulatory occupational exposure limits (OELs) established.

#### 9. Physical and chemical properties

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Form Solid, Granular

Colour White

Odour Slight Chlrine
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/cm3 at 20 °C Partition coefficient No data available

Explosive properties None

Solubility Soluble in water 30 g/l at 20 °C Molecular Formula C3Cl2N3NaO3 · 2H2O

Molecular Weight 256 g/mol

## 10. Stability and reactivity

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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, anexplosion 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. Ignitions 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 (CO2). Nitrogen oxides (NOx).

# 11. Toxicological information

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Rout Of Entry Inhalation. Ingestion.

Toxicity to Animal Acute toxicity:

-Rat, oral LD50 1671 mg/kg -Rat dermal LD50 >5000 mg/kg

Eye irritationSevere irritantDermal irritationSevere irritant

Mutagenicity Not mutagenic in five salmonella strains with or without metabolic

activation.

Carcinogenity Not classified by IARC, OSHA, EPA

Not included in NTP11 Report on Carcinogens

Reproductive toxicity Sodium dichloroisocyanurate acid when given orally to pregnant mice

Chronic toxicity

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

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Eco Toxicity 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.

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

Not Available

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

hydrolysis is biodegradable.

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

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Waste treatment Method

COD and BOD 5

Mobility in soil

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

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DOT

UN Number UN3307

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

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(troclosene sodium, dihydrate)

Hazard Class
Packing group

Environmental hazards

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

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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.

P8 OXIDISING LIQUIDS AND SOLIDS 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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