Material Safety Data Sheet

Sodium Dichloroisocyanurate Dehydrate (RXSOL-32-3021-025)

1. Product and Company Identifaction

Product Name	SODIUM DI CHLOROISOCYANURATE DIHYDRATE
Part Number	RXSOL-60-6605-495

Company Details:

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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2. Composition / informationon ingredients

Chemical Name	CAS	EC number	Weight	Moleculer Formula
SODIUM DI CHLOROISOCYANURATE	2893-78-9	220-767-7	219,95 g/mol	$C_3Cl_2N_3NaO_3$

3. Hazards Identification

Signal Word	Danger
Classification of the substance or mixture	Classification according to Regulation (EC) No 1272/2008 Oxidizing solids (Category 2), H272 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335 Short-term (acute) aquatic hazard (Category 1), H400 Long-term (chronic) aquatic hazard (Category 1), H410 For the full text of the H-Statements mentioned in this Section, see Section 16.
Hazard Statements	H272 May intensify fire; oxidizer. H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects.
P280 Wear protective gloves.P305 + P351 + P338	Wear protective gloves/ protective clothing/ eye protection/ face protection.F IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard information	EUH031 Contact with acids liberates toxic gas. EUH044 Risk of explosion if heated under confinement
Precautionary statement(s)	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe dusts or mists. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Other hazards	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. Lachrymator., Sternutator.

4. First Aid Measures

Description of first-aid measures	No data available
Most important symptoms and effects, both acute and delaye	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

5. Fire-fighting Measures

extinguishing media	No data available
Special hazards arising from the substance or mixture	Carbon oxides Nitrogen oxides (NOx) Hydrogen chloride gas Sodium oxides Combustible. Avoid shock and friction. In the event of decomposition: danger of explosion!
Further information	No data available
Advice for firefighters	No data available

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	For personal protection see section 8.
Enviromental Precaution	No data available
Methods and materials for containment and cleaning up	.Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for safe handling	For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Moisture sensitive
Storage class	Storage class (TRGS 510): 4.1A: Other explosive hazardous materials
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Control parameters

8. Exposure controls and personal protection

Control parameters	Ingredients with workplace control parameters
Exposure controls	No data available

9. Physical and chemical properties

Physical state	Powder
Colour	White
Odour	Chlorine
Odor Threshold	Not Applicable
pH	6,2 - 6,8 at 10 g/l at 25 °C
Melting Point	No data available
Boiling Point	No data available.
Flash Point	No data available

Evaporation Rate	Not Applicable
Flammability (solid, gas)	The product is not flammable. - Flammability (solids)
Explosive properties	May mass explode in fire.Risk of explosion if heated under confinement
Upper/lower flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	240 °C
Vapour pressure	0,000 hPa at 20 °C
Density	1,97 g/cm3 at 25 °C
Vapour Density	No Data Available
Specific Gravity	No data available
Partition coefficient	No data available
Explosive properties	May mass explode in fire.Risk of explosion if heated under confinement.
Solubility	236,8 g/l at 25 °C - US-EPA- completely soluble
Particle characteristics	No data available
Oxidizing properties	The substance or mixture is classified as oxidizing with the category 2.
Other safety information	No data available

10. Stability and reactivity

Reactivity	No data available
Stability	No data available
Possibility of hazardous reactions	No data available
Conditions to avoid	Strong heating.
Incompatible materials	Strong bases, Strong oxidizing agents
Hazardous Polymerization	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - male and female - 1.823 mg/kg (US-EPA) Remarks: (in analogy to similar products) The value is given in analogy to the following substances: troclosene sodium, dihydrate Acute toxicity estimate Oral - 1.823 mg/kg (Calculation method) LC50 Inhalation - Rat - male and female - 4 h - 0,27 - 1,17 mg/l - dust/mist (OECD Test Guideline 403) LD50 Dermal - Rat - male and female - > 5.000 mg/kg (US-EPA)
Skin corrosion/irritation	Skin - Rabbit Result: Causes severe burns. - 24 h (US-EPA)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Causes serious eye damage. (US-EPA)
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)
Germ cell mutagenicity	Test Type: Ames test Test system: Escherichia coli/Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: sister chromatid exchange assayTest system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: Regulation (EC) No. 440/2008, Annex, B.19 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: Regulation (EC) No. 440/2008, Annex, B.17 Result: negative Test Type: Mutagenicity (mammal cell test): chromosome aberration. Species: Rat Cell type: Bone marrow Application Route: Oral Method: OECD Test Guideline 475 Result: negative
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	Inhalation - May cause respiratory irritation.
Additional Information	Endocrine disrupting properties

Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Repeated dose toxicity - Mouse - female - Oral - 104 Weeks - NOAEL (No observed adverse effect level) - 1.523 mg/kg Repeated dose toxicity - Rat - male and female - inhalation (dust/mist/fume) - 4 Weeks Remarks: (in analogy to similar products) (ECHA) The value is given in analogy to the following substances: symclosene RTECS: XZ1900000 Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

Persistence and degradability	Biodegradability aerobic - Exposure time 8 h Result: 100 % - Readily biodegradable. Remarks: (ECHA)
Toxicity	Toxicity to fish static test LC50 - Menidia beryllina (Inland silverside) - 8.000 mg/l -96 h (US-EPA) Toxicity to daphnia and other aquatic invertebrates static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h Remarks: (ECHA) Toxicity to algae static test ErC50 - Skeletonema costatum - > 100 mg/l - 72 h (ISO 10253) Toxicity to bacteria EC50 - activated sludge - > 4.500 mg/l - 3 h (OECD Test Guideline 209)Toxicity to fish(Chronic toxicity) semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - 1.000 mg/l - 28 d (OECD Test Guideline 215) Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity) static test EC50 - Daphnia magna (Water flea) - 2.600 mg/l - 21 d (OECD Test Guideline 211)
Bioaccumulative potential	No data available
Toxicity to fish	static test LC50 - Menidia beryllina (Inland silverside) - 8.000 mg/l - 96 h (US-EPA)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h Remarks: (ECHA)
Toxicity to algae	static test ErC50 - Skeletonema costatum - > 100 mg/l - 72 h (ISO 10253)
Toxicity to bacteria	EC50 - activated sludge - > 4.500 mg/l - 3 h (OECD Test Guideline 209)
Toxicity to fish(Chronic toxicity	semi-static test NOEC - Oncorhynchus mykiss (rainbow trout) - 1.000 mg/l - 28 d (OECD Test Guideline 215)
Toxicity to daphnia and other aquatic invertebrates(Chronic toxicity	static test EC50 - Daphnia magna (Water flea) - 2.600 mg/l - 21 d (OECD Test Guideline 211)
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.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	No data available

13. Disposal considerations

Waste treatment MethodNo data available

14. Transport information

UN number	ADR/RID: 2465 IMDG: 2465 IATA: 2465
UN proper shipping name	ADR/RID: DICHLOROISOCYANURIC ACID SALTS IMDG: DICHLOROISOCYANURIC ACID, SALTS IATA: Dichloroisocyanuric acid, salts
Transport hazard class(es)	ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

Packaging group	ADR/RID: II IMDG: II IATA: II
Environmental hazards	ADR/RID: yes IMDG Marine pollutant: yes IATA: no
Special precautions for user	Tunnel restriction code : (E)
Further information	No data available

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	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. : OXIDISING LIQUIDS AND SOLIDS : ENVIRONMENTAL HAZARDS
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

16. Other information

Other Information	The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if RX Marine International has been advised of the possibility of such damages.