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### MATERIAL SAFETY DATA SHEET (MSDS)

#### **SECTION 1. Product identifiers**

Product name: Dichloroisocyanuric acid sodium salt, 98% Product Code: D 1540 CAS No : 2893-78-9

1.2. Relevant identified uses of the substance or mixture and uses advised against Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet
Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email <u>info@ottokemi.com</u>

1.4. Emergency telephone number Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm)

## SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Oxidizing solids, (Category 2) H272: May intensify fire; oxidizer. Acute toxicity, (Category 4) H302: Harmful if swallowed. Skin corrosion, (Sub-category 1A) H314: Causes severe skin burns and eye damage. Serious eye damage, (Category 1) H318: Causes serious eye damage. Specific target organ toxicity single exposure, (Category 3), Respiratory system H335: May cause respiratory irritation. Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life. Long-term (chronic) aquatic hazard, (Category 1) H410: Very toxic to aquatic life with long lasting effects. 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram Signal Word Danger 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. Precautionary Statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe dust. P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

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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. Supplemental Hazard information (EU) EUH031 Contact with acids liberates toxic gas. EUH044 Risk of explosion if heated under confinement. Reduced Labeling (<= 125 ml) Pictogram Signal Word Danger Hazard Statements H314 Causes severe skin burns and eye damage. **Precautionary Statements** P260 Do not breathe dust. 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 rinsina. Supplemental Hazard information (EU) EUH031 Contact with acids liberates toxic gas. EUH044 Risk of explosion if heated under confinement. 2.3 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. Ecological information: 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. Toxicological information: 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. Lachrymator., Sternutator. **SECTION 3: Composition/information on ingredients** 3.1 Substances Formula : C3Cl2N3NaO3 Molecular weight : 219,95 g/mol

Molecular weight : 219,95 CAS-No. : 2893-78-9 EC-No. : 220-767-7

Component	Classification	Concentration
Dichloroisocyanuric acid sodium salt		
CAS-No. 2893-78-9 EC-No. 220-767-7	Ox. Sol. 2; Acute Tox. 4; Skin Corr. 1A; Eye Dam. 1; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H272, H302, H314, H318, H335, H400, H410 Concentration limits: >= 10 %: STOT SE 3, H335; >= 10 %: . EUH031:	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

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**SECTION 4: First aid measures** 4.1 Description of first-aid measures General advice First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance. If inhaled After inhalation: fresh air. Call in physician. In case of skin contact In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately. In case of eye contact After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. If swallowed After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise. 4.2 Most important symptoms and effects, both acute and delayed The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 4.3 Indication of any immediate medical attention and special treatment needed No data available **SECTION 5: Firefighting measures** 5.1 Extinguishing media Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given. 5.2 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! Development of hazardous combustion gases or vapours possible in the event of fire. Has a fire-promoting effect due to release of oxygen. 5.3 Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. 5.4 Further information Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system. **SECTION 6: Accidental release measures** 6.1 Personal precautions, protective equipment and emergency procedures Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. 6.2 Environmental precautions Do not let product enter drains. 6.3 Methods and materials for containment and cleaning up Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. 6.4 Reference to other sections

For disposal see section 13.

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# **SECTION 7: Handling and storage**

7.1 Precautions for safe handling Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition. Hygiene measures Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2. 7.2 Conditions for safe storage, including any incompatibilities Storage conditions Tightly closed and away from sources of ignition and heat. Observe national regulations. Do not store near acids. Moisture sensitive. Storage class Storage class (TRGS 510): 4.1A: Other explosive hazardous materials 7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated **SECTION 8: Exposure controls/personal protection** 8.1 Control parameters Ingredients with workplace control parameters 8.2 Exposure controls Personal protective equipment Eye/face protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles Skin protection This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L Body Protection protective clothing Respiratory protection required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. Control of environmental exposure Do not let product enter drains.

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### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state b) Color c) Odor d) Melting point/freezing point e) Initial boiling point and boiling range f) Flammability (solid. gas) g) Upper/lower flammability or explosive limits h) Flash point i) Autoignition temperature j) Decomposition temperature k) pH I) Viscosity

m) Water solubility n) Partition coefficient: n-octanol/water o) Vapor pressure p) Densitv Relative density q) Relative vapor density r) Particle characteristics s) Explosive properties

t) Oxidizing properties

9.2 Other safety information No data available

#### **SECTION 10: Stability and reactivity** 10.1 Reactivity

Risk of explosion if heated under confinement. The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed. Contact with acids liberates toxic gas. 10.2 Chemical stability The product is chemically stable under standard ambient conditions (room temperature) . 10.3 Possibility of hazardous reactions Generates dangerous gases or fumes in contact with: Acids 10.4 Conditions to avoid no information available 10.5 Incompatible materials

Strong bases, Strong oxidizing agents

10.6 Hazardous decomposition products

In the event of fire: see section 5

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powder white Chlorine No data available

No data available

No data available

No data available

No data available No data available

240 °C

6,2 - 6,8 at 10 g/l at 25 °C Viscosity, kinematic: No data available Viscosity, dynamic: No data available 236,8 g/l at 25 °C - US-EPA- completely soluble No data available

< 0,000 hPa at 20 °C 1,97 g/cm3 at 25 °C No data available No data available

No data available

May mass explode in fire. Risk of explosion if heated under confinement. The substance or mixture is classified as oxidizing with the category 2.

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### **SECTION 11: Toxicological information**

11.1 Information on toxicological effects Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg Inhalation LC50 Rat: > 50mg/L. Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant). Special Remarks on Toxicity to Animals: Not available. Special Remarks on other Toxic Effects on Humans: Not available. Special Remarks on other Toxic Effects on Humans: Not available.

### **SECTION 12: Ecological information**

12.1 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) 12.2 Persistence and degradability Biodegradability aerobic - Exposure time 8 h Result: 100 % - Readily biodegradable. Remarks: (ECHA) 12.3 Bioaccumulative potential No data available 12.4 Mobility in soil No data available 12.5 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. 12.6 Endocrine disrupting properties Product<sup>.</sup> : The substance/mixture does not contain components Assessment 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. 12.7 Other adverse effects No data available

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### **SECTION 13: Disposal considerations**

13.1 Waste treatment methods No data available

### **SECTION 14: Transport information**

14.1 UN number			
ADR/RID: 2465	IMDG: 2465	IATA: 2465	
14.2 UN proper shipping nar	ne		
ADR/RID : DICHL	OROISOCYANURIC ACID SALTS		
IMDG : DICHL	OROISOCYANURIC ACID, SALTS		
IATA : Dichlor	oisocyanuric acid, salts		
14.3 Transport hazard class	(es)		
ADR/RID: 5.1	IMDG: 5.1	IATA: 5.1	
14.4 Packaging group			
ADR/RID: II	IMDG: II	IATA: II	
14.5 Environmental hazards			
ADR/RID: yes	IMDG Marine pollutant: yes	IATA: no	
14.6 Special precautions for			
Tunnel restriction code	: (E)		
Further information	: No data available		1
SECTION 15: Regulatory in			
15.1 Safety health and envir	ronmental regulations/legislation specific for t	he h	

15.1 Safety, health and environmental regulations/legislation specific substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Authorisations and/or restrictions on use 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.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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