

Material SAFETY DATA SHEET

1. COMPANY AND CHEMICAL PRODUCT IDENTIFICATION

XUZHOU TIANRUN CHEMICAL CO.,LTD

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Substance Name: Disinfecting Granules

SDS Number: 10103

Chemical Name/Synonyms: Sodium Salt of Dichloroisocyanuric Acid,
Sodium Dichloro-s-triazinetrione, Anhydrous Sodium Dichloroisocyanurate (NaDCC),
Troclosene Sodium

Product Use and Properties: algacide, bactericide, disinfectant, fungicide,
microbiocide/microbiostat (Active ingredient in household dry bleaches;
dishwashing compounds, scouring powders; detergent sanitizers, commercial laundry;
bleaches, swimming pool disinfectant).

2. COMPOSITION, INFORMATION ON INGREDIENTS

Component/Ingredient: Sodium Dichloro-s-triazinetrione

Percentage: 56 %

CAS-Number: 2893-78-9

Number in Annex: 613-030-00-X

EINECS Number: 220-767-7

3. HAZARDS IDENTIFICATION

Physical/Chemical Hazards: Strong Oxidizer. Contact with combustible material may cause fire. Thermal decomposition may release toxic gases.

Human Health Hazards: Corrosive. Avoid contact with eyes, can cause irreversible eye damage. Avoid contact with skin; may cause burns to moist skin, if not promptly removed. Avoid breathing this material; may be fatal, if inhaled. Harmful if swallowed.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If irregular or not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call for medical attention immediately.

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with clean water for at least 15 minutes. Retract eyelids to ensure complete wash of all eye and lid tissues. In case of continued irritation, get medical attention immediately.

Skin Contact: In case of contact with skin, wash off immediately with plenty of water.

Immediately remove all contaminated clothing including footwear. If irritation persists, get medical attention.

Ingestion: If victim is conscious and alert, allow to rinse mouth, and then drink two cups of water. Never give anything by mouth to an unconscious person. DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs spontaneously, keep airway clear. Drink more water when vomiting stops. Seek medical attention immediately.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Flood with plenty of water. Do not use dry chemicals, carbon dioxide or halogenated extinguishing agents.

Fire and Explosion Hazards: Fire hazards from this compound are negligible. In case of combustion or heat by an outside source (temperatures > 240 °C), the product will release under a self-sustaining decomposition dense noxious gases (e.g. hydrogen oxide, nitrous oxides) without visible flame. Wet material may generate nitrogen trichloride, an explosion hazard.

Fire Fighting: Do not inhale explosion or combustion gases. In case of combustion use an approved/certified respirator or equivalent. Wear protective clothing. Isolate hazard area and deny entry. Consider evacuation of personnel located downwind. Collect contaminated firefighting water separately. Do not discharge contaminated water into drains. Dispose contaminated drums and damaged or damp material in a proper manner. Contact company for further instructions.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protection of staff: Isolate hazard area and keep unnecessary people away. Wear chemical safety goggles. Have suitable clothing and gloves, avoid exposing skin. A self-contained breathing apparatus should be used, if working in contaminated area. Remove clothing immediately after work. Wash hands thoroughly before eating, drinking, smoking or using the toilet.

Environmental Precautions and Clean up methods: Stop leak if without risk. Do not get water inside container. Avoid raising dust. Ensure ventilation and circulation of air. Prevent entry into sewers, water supplies and confined areas. Damp material/product should be neutralized to a non-oxidizing state. When material is being removed, follow the directions under HANDLING AND STORAGE. Call for further assistance on disposal.

7. HANDLING AND STORAGE

Handling: Do not get in eyes, on skin, and or on clothing. Avoid breathing dust and vapors when opening product containers. Ensure adequate ventilation. Wash thoroughly after handling. Never add water to this product; always add the product to large quantities of water. Use clean and dry utensils.

Storage: Follow all current regulations and standards. Keep properly labeled product container tightly closed and dry in a cool, well ventilated area. Keep away from heat and direct sunlight. Keep away from food, drink, animal feed. Keep away from potential sources

of ignition and any incompatible substances.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Protective Provisions/Engineering Measures: Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels low. Use respirator in dust-laden atmosphere.

Hygiene Measures: Remove clothing immediately after work. Wash hands, forearms, and face thoroughly before eating, drinking, smoking, using the toilet and at the end of the day.

Occupational Exposure Limits: None.

Personal Protective Equipment

Respiratory System: Wear approved/certified respirator or equivalent when ventilation is inadequate.

Skin and Body: Depending of the amount of product handled, wear full protective clothing to minimize skin contact.

Hands: Wear suitable gloves.

Eyes: Wear protective chemical safety goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White granules

Odour: Chlorine

pH: 5.5-7.0 at 25°C (1% aqueous solution)

Molecular Weight: 219.95

Formula: C₃N₃O₃CL₁₂Na

Boiling & Melting Point: N/A

Decomposition Point: 240-250°C

Flammability: N/A

Bulk Density: 900 – 1,000 kg/m³ at 20°C

Oxidizing Properties: Yes

Solubility: 240g/l in water at 25°C

10. STABILITY AND REACTIVITY

Stability: The product is stable under normal temperatures and pressures. Keep product dry. Follow instructions under HANDLING AND STORAGE.

Reactivity: Wet material may generate nitrogen trichloride, a potential explosion hazard. Avoid contact with any oxidizable organic material.

Incompatibility: Incompatible products are acids, ammonia, bases, calcium hypochlorite, reducing agents and organic solvents.

Decomposition: Hazardous decomposition and combustion products such as chlorine, cyanogens chloride, hydrogen oxide, nitrogen, nitrogen trichloride, nitrous oxides, phosgene can be generated when in contact with heat or water.

11. TOXICOLOGICAL INFORMATION

Eye and Skin irritation: Very hazardous in case of eye contact and contact with wet skin.

Acute Toxicity: Oral-rat LD50= 735 mg/kg; dermal-rabbit LD50 = 2,000 mg/kg.

Health Effects: Direct contact on wet skin may cause severe irritation, pain and potential burns. Direct eye contact may cause severe irritation, pain, burns, and permanent damage including blindness. The product granules should not cause any respiratory problems. If ground or in powdery form, inhaling can cause mucous membrane irritation with coughing and shortness of breath. Ingestion may cause immediate pain and severe burns of the mucous membranes in the mouth, esophagus and gastrointestinal tract.

12. ECOLOGICAL INFORMATION

Ecotoxicity: The product is highly toxic to fish (Bluegill Sunfish - *Lepomis macrochirus* LC50 = 0.40 ppm, and Rainbow Trout – LC50 = 0.24 ppm), and invertebrates (*Daphnia magna*: 0.05 ppm < EC50 < 0.1 ppm).

Fate and Transport: The product is subject to hydrolysis within minutes, forming cyanuric acid and halogen moieties, which is inherently biodegradable. The material degrades relatively fast and is not considered to bioaccumulate.

Persistence: The product is unstable in the environment because the available chlorine is rapidly reduced. Hydrolysis occurs within minutes. None of the hydrolysis products are persistent.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal, Waste of Residues, Contaminated Packaging: Waste must be disposed in accordance with applicable federal, state and local environmental control regulations. Keep spilled product out of trash containers, drains, and sewers. Incompatible material can cause a reaction and combustion. Do not transport wet or damp material. Damp material should be neutralized. Contact Company for further disposal instructions.

14. TRANSPORT INFORMATION

Land Transport - ADR/RID

Proper Shipping Name: Dichloroisocyanuric Acid Salts

ID Number: UN 2465

Hazard Class: 5.1

Packaging Group: II

Hazard ID Number: 50

Label Requirements: 5.1

Marine Transport – IMDG/GGV

Proper Shipping Name: Dichloroisocyanuric Acid Salts

ID Number: UN 2465

Hazard Class: 5.1

Packaging Group: II

Air Transport – ICAO/IATA

Proper Shipping Name: Dichloroisocyanuric Acid Salts

ID Number: UN 2465

Hazard Class: 5.1

Packaging Group: II

15. REGULATORY INFORMATION

EEC Directive: 91/155/EEC amended by 93/112/EEC; Dangerous Substances and Preparations, and in accordance with current product labeling:

EINECS Number: 220-767-7

Hazard Symbols:

O: Oxidising
Xn: Harmful
N: Dangerous for the environment

Risk Phrases:

R8: Contact with combustible material may cause fire.
R22: Harmful if swallowed.
R31: Contact with acids liberates toxic gas.
R36/37: Irritating to eyes and respiratory system.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S2: Keep out of reach of children.
S8: Keep container dry.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S41: In case of fire and/or explosion do not breathe fumes.
S46: If swallowed, seek medical advice immediately, and show this container or label.
S60: This material and/or its container must be disposed of as hazardous waste.
S61: Avoid Release to the environment. Refer to special instructions/Safety data sets.

16. OTHER INFORMATION

History: no previous issue

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Prepared by: **XUZHOU TIANRUNCHEMICAL CO.,LTD**

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