

Technical Data Sheet (TDS)

1. Product Overview

- Product Name: Sodium Dichloroisocyanurate (SDIC)
- English Name: Sodium Dichloroisocyanurate
- CAS Number: 2893-78-9
- Formula: $C_3Cl_2N_3NaO_3$
- Molecular Weight: 219.95 g/mol
- Product Characteristics: High-efficiency, stable chlorinated disinfectant and oxidizing agent. Releases chlorine slowly in water, providing long-lasting bactericidal, virucidal, and fungicidal effects. Stable under dry storage conditions, non-hygroscopic (compared to other chlorinated disinfectants). Suitable for water treatment, disinfection, and bleaching across industrial and municipal fields.

2. Technical Specifications (Complies with GB/T 22388-2008)

Item	Specification
Appearance	White crystalline powder or granular solid
Available Chlorine Content	55.0-60.0%
Moisture Content	≤ 3.0%
pH Value (1% Aqueous Solution, 25°C)	5.0-7.0
Insoluble Matter in Water	≤ 0.1%
Heavy Metals (Pb)	≤ 0.0005%
Arsenic (As)	≤ 0.0001%
Mercury (Hg)	≤ 0.000005%
Cadmium (Cd)	≤ 0.00005%
Particle Size	80-200 Mesh (passing rate ≥ 95%)
Solubility (20°C, water)	≥ 25 g/100 mL
Stability	Retains ≥ 90% available chlorine after 24 months (25°C, dry storage)

3. Product Advantages

1. **High Stability:** Low moisture absorption, retains chlorine content longer than sodium hypochlorite; easy to store and transport.
2. **Efficient Disinfection:** Broad-spectrum activity against bacteria, viruses, fungi, and algae; kills 99.9% of pathogens quickly.
3. **Long-Lasting Effect:** Slow chlorine release ensures sustained disinfection, reducing application frequency.
4. **Versatile Applications:** Suitable for water treatment, surface disinfection, and bleaching; compatible with most water systems.
5. **Cost-Effective:** High available chlorine content (55-60%); low dosage, reducing overall disinfection costs.

4. Application Fields



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

- **Water Treatment:** Municipal drinking water disinfection; sewage treatment; swimming pool, spa, and aquarium water sterilization.
- **Surface Disinfection:** Medical facilities, food processing plants, public areas, and household surfaces; equipment and tool sterilization.
- **Bleaching:** Textile, paper, and pulp bleaching; stain removal from fabrics and industrial materials.
- **Wastewater Treatment:** Industrial wastewater (breeding, food processing, chemical) sterilization and deodorization.
- **Other Fields:** Food preservation (surface disinfection); aquaculture water disinfection; mold control in buildings.

5. Usage Methods

• Dosage (as available chlorine):

- Drinking Water Disinfection: 0.2-0.5 mg/L (dissolve and add to water).
- Swimming Pool Water: 1.0-3.0 mg/L (maintain residual chlorine 0.3-0.5 mg/L).
- Surface Disinfection: Dilute to 0.1-0.5% solution (1-5 g/L); spray or wipe, contact for 10-30 minutes.
- Wastewater Treatment: 5-20 mg/L (adjust based on pollutant load).
- **Usage:** Dissolve in water before use; stir evenly; avoid contact with acids or ammonia.
- **Optimal Conditions:** Use at 15-35°C; pH 6.0-8.0 for best disinfection effect; avoid direct sunlight.

6. Packaging & Storage

• Packaging Specifications:

- 25 kg kraft paper bags with PE inner lining (industrial grade).
- 1 kg aluminum foil bags (household/commercial use).
- 1000 kg FIBC bulk bags (large-scale industrial use).
- Custom packaging available upon request.

- **Storage Conditions:** Store in cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); keep tightly closed; avoid moisture, direct sunlight, and high temperature; store separately from acids, reducing agents, combustibles, and organic materials.

- **Shelf Life:** 24 months (unopened, specified conditions); use promptly after opening.

- **Transportation:** UN 2465 (Class 5.1 Oxidizer); transport in sealed, corrosion-resistant containers; avoid collision, moisture, and mixing with incompatible substances.

7. Safety & Protection

- Strong oxidizer, corrosive, and toxic to aquatic organisms.
- Operators must wear chemical goggles, face shield, nitrile gloves, and acid-resistant clothing.
- In case of contact, rinse with plenty of water for ≥ 15 minutes; seek medical attention immediately.
- Do not ingest; if swallowed, rinse mouth with water and consult a doctor.
- Avoid mixing with acids (releases toxic chlorine gas); dispose of waste properly to protect the environment.

8. Quality Assurance

- Manufactured in accordance with ISO 9001 quality management system standards.
- Each batch is tested with a Certificate of Analysis (COA) to meet GB/T 22388-2008.
- Provide technical support: dosage adjustment, dilution method optimization, and safety operation guidance.