

## Technical Data Sheet (TDS)

### 1. Product Overview

- Product Name: Peracetic Acid Aqueous Solution
- English Name: Peracetic Acid
- CAS Number: 79-21-0
- Formula:  $C_2H_4O_3$
- Molecular Weight: 76.05 g/mol
- Product Characteristics: High-efficiency broad-spectrum oxidizing disinfectant. Rapidly kills bacteria, viruses, fungi, and algae without residual toxic byproducts. Stable in aqueous solution (with stabilizers); compatible with most water systems. Flammable and corrosive; requires proper handling.

### 2. Technical Specifications (Complies with GB/T 19108-2021)

Item	Specification
Appearance	Colorless to pale yellow transparent liquid, pungent odor
Peracetic Acid Content	15.0-20.0%
Free Acetic Acid Content	$\leq 5.0\%$
pH Value (25°C)	2.0-4.0
Density (25°C)	1.03-1.07 g/cm <sup>3</sup>
Heavy Metals (Pb)	$\leq 0.0005\%$
Arsenic (As)	$\leq 0.0001\%$
Stability (25°C, 6 months)	$\geq 85\%$ PAA Retention
Flash Point (closed cup)	40°C
Solubility	Fully miscible with water and alcohols

### 3. Product Advantages

1. Broad-Spectrum Disinfection: Kills 99.9% of bacteria, viruses, fungi, and algae (including drug-resistant strains). 2. No Toxic Residues: Decomposes into acetic acid, water, and oxygen; no harmful byproducts. 3. Rapid Action: Takes effect within 1-5 minutes; no prolonged contact required. 4. Wide Adaptability: Effective in pH 2.0-8.0 and temperature 10-40°C. 5. Versatile Compatibility: Suitable for water, surface, and food-related disinfection.

## 4. Application Fields

- Water Treatment: Municipal drinking water, sewage, swimming pool, and aquaculture water disinfection. - Surface Disinfection: Medical facilities, food processing plants, public areas, and equipment sterilization. - Food Preservation: Fresh fruits, vegetables, and seafood surface disinfection (extends shelf life). - Wastewater Treatment: Industrial wastewater (breeding, food, chemical) sterilization and deodorization. - Other Fields: Textile bleaching; air disinfection (hospitals, laboratories).

## 5. Usage Methods

- Dosage (as PAA): - Drinking Water Disinfection: 0.5-2.0 mg/L - Sewage Treatment: 5-20 mg/L - Surface Disinfection: Dilute to 0.1-0.5% solution (1000-5000 mg/L); spray/wipe, contact 5-10 minutes. - Food Preservation: Dilute to 0.02-0.05% solution (200-500 mg/L); soak 3-5 minutes, rinse with clean water. - Usage: Dilute with water before use; stir evenly; avoid mixing with incompatible substances. - Optimal Conditions: Use at 15-35°C; avoid direct sunlight during application.

## 6. Packaging & Storage

- Packaging Specifications: 25 kg HDPE plastic drums; 200 kg HDPE drums; 1000 kg IBC totes (custom available). - Storage Conditions: Cool, dark, well-ventilated warehouse ( $\leq 25^{\circ}\text{C}$ ); keep tightly closed; avoid sunlight, heat, and open flames; store separately from flammables, reducing agents, and ammonia. - Shelf Life: 6 months (unopened); use within 1 month after opening. - Transportation: UN 2131 (Class 5.2); transport in cool, flame-resistant vehicles; avoid collision and leakage.

## 7. Safety & Protection

- Flammable and corrosive; toxic to aquatic organisms. - Operators must wear chemical goggles, face shield, nitrile gloves, and flame-resistant clothing. - In case of contact, rinse with plenty of water for  $\geq 15$  minutes; seek medical attention immediately. - Do not ingest; keep away from children and pets. - Avoid mixing with acids, ammonia, or reducing agents (risk of violent reaction).

## 8. Quality Assurance

- Manufactured in accordance with ISO 9001 quality management system. - Each batch is tested with a COA to meet GB/T 19108-2021 standards. - Provide technical support: dosage adjustment, dilution optimization, and safety operation guidance.