

Technical Data Sheet (TDS)

1. Product Overview

- Product Name: Benzoic Acid
- English Name: Benzoic Acid
- CAS Number: 65-85-0
- Formula: C₇ H₆ O₂
- Molecular Weight: 122.12 g/mol
- Product Characteristics: White crystalline powder with a faint aromatic odor. High-purity aromatic carboxylic acid with excellent antibacterial and preservative properties. Chemically stable, low-toxic, and soluble in organic solvents. Suitable for food preservation, pharmaceuticals, cosmetics, and chemical synthesis.

2. Technical Specifications

Item	Specification
Appearance	White crystalline powder
Purity (HPLC)	≥ 99.5%
Melting Point	121-123°C
Water Content	≤ 0.5%
Heavy Metals (Pb)	≤ 0.5 ppm
Heavy Metals (As)	≤ 0.1 ppm
Iron (Fe)	≤ 1 ppm
Non-Volatile Residue	≤ 0.05%
Solubility	Soluble in ethanol/ether; slightly soluble in water
pH Value (1% aqueous solution, 25°C)	2.5-3.5

3. Product Advantages

1. High Purity: Meets food/pharmaceutical standards with low impurity content.
2. Excellent Preservative Activity: Inhibits bacteria/fungi growth, ideal for food/cosmetics.
3. Chemical Stability: Stable under normal storage/use conditions.
4. Low Toxicity: Safe for human contact (food/pharmaceutical grade).

4. Application Fields

- Food Industry: Preservative for beverages, sauces, baked goods, and dairy products.
- Pharmaceutical: Excipient and antibacterial agent in drugs.
- Cosmetics: Preservative in creams, lotions, and hair care products.
- Chemical Synthesis: Precursor for benzoate esters, pharmaceuticals, and dyes.

5. Usage Methods

- Dosage: 0.05-0.1% (food preservation); 0.1-0.3% (cosmetics/pharmaceuticals).
- Application: Dissolve in ethanol/alkaline solution before mixing; avoid direct contact with strong bases.

- Optimal Conditions: Store in dry environment; avoid moisture absorption.

6. Packaging & Storage

- Packaging: 1kg/5kg HDPE bags, 25kg cardboard drums, 50kg steel drums (UN-approved).
- Storage: Cool, dry, well-ventilated warehouse ($\leq 30^{\circ}\text{C}$); sealed, away from heat/oxidizers/moisture.
- Shelf Life: 24 months (unopened, specified conditions).
- Transportation: Non-hazardous; transport by ordinary vehicles.

7. Safety & Protection

- Low-toxic; avoid dust inhalation and skin/eye contact.
- Wear dust mask, nitrile rubber gloves, and safety glasses during handling.
- In case of eye contact, rinse with plenty of water for 5-10 minutes.

8. Quality Assurance

- Manufactured under ISO 9001 and ISO 22000 (food-grade) standards.
- Each batch comes with a COA for compliance verification.
- Provide technical support for formulation optimization and application guidance.