

Technical Data Sheet (TDS)

1. Product Overview

- Product Name: Salicylic Acid
- English Name: Salicylic Acid
- CAS Number: 69-72-7
- Formula: C₇ H₆ O₃
- Molecular Weight: 138.12 g/mol
- Product Characteristics: White crystalline powder with a faint phenolic odor. High-purity aromatic carboxylic acid with excellent keratolytic, antibacterial, and anti-inflammatory properties. Chemically stable, moderately toxic, and soluble in organic solvents. Suitable for pharmaceuticals, cosmetics, pesticides, and chemical synthesis.

2. Technical Specifications

Item	Specification
Appearance	White to off-white crystalline powder
Purity (HPLC)	≥ 99.0%
Melting Point	158-161°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)	2.0-3.0

3. Product Advantages

1. High Purity: Low impurity content ensures stable efficacy in pharmaceutical/cosmetic applications.
2. Multi-Functional Activity: Keratolytic, antibacterial, and anti-inflammatory properties.
3. Chemical Stability: Stable under normal storage/use conditions.
4. Versatile Application: Suitable for drug formulations, acne treatments, and pesticide synthesis.

4. Application Fields

- Pharmaceutical: Active ingredient in anti-acne, anti-fungal, and pain-relief drugs.
- Cosmetics: Keratolytic agent in acne creams, exfoliating products, and hair care formulations.
- Pesticides: Precursor for fungicides and herbicides.
- Chemical Synthesis: Intermediate for aspirin, dyes, and fragrances.

5. Usage Methods

- Dosage: 0.5-2% (cosmetics); 1-5% (pharmaceutical topical formulations).

- Application: Dissolve in ethanol/propylene glycol before mixing; avoid direct contact with mucous membranes.
- Optimal Conditions: Store in dry environment; avoid moisture and strong bases.

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

- Moderately toxic; avoid dust inhalation, skin/eye contact, and ingestion.
- Wear dust mask, nitrile rubber gloves, and safety glasses during handling.
- In case of eye contact, rinse with plenty of water for 15 minutes; seek medical attention.

8. Quality Assurance

- Manufactured under ISO 9001 quality management system.
- Each batch comes with a COA for compliance verification.
- Provide technical support for formulation optimization and application guidance.