

Technical Data Sheet (TDS)

- Sodium Acetate (Food Grade)

Issue Date: 29 FEB 2026 | Version: V1.0

1. Product Overview

- **Product Name:** Sodium Acetate (Food Grade)
- **CAS Number:** 127-09-3
- **EINECS/EC Number:** 204-823-8
- **Chemical Formula:** C₂H₃NaO₂
- **Molecular Weight:** 82.03 Da
- **Chemical Name:** Sodium ethanoate / Acetic acid sodium salt
- **Product Characteristics:** High-purity food-grade sodium acetate (≥99.0%) produced by neutralization of food-grade glacial acetic acid and sodium hydroxide, followed by crystallization and drying. White free-flowing crystalline powder, odorless with a slightly salty mild acetic taste, highly water-soluble and hygroscopic (requires dry storage). As a multi-functional food additive, it acts as **acidity regulator, buffer, preservative, flavor improver and sequestrant**; stabilizes food pH system, inhibits spoilage microbial growth, improves taste roundness, and chelates trace metal ions to prevent food discoloration. Non-toxic, natural metabolite, fully biodegradable; compliant with GB 2760/FDA/EC/CAC/FCC/USP standards, suitable for various food production and processing with no dosage limit (GMP).
- **Core Application:** Food additive (acidity regulator/buffer/preservative) for beverage, dairy, meat products, condiments, baked goods, canned food, instant food and snack food industries; pH adjuster in food fermentation and processing.

2. Technical Specifications (Compliant with GB 2760 & FCC/USP)

Item	Standard Requirement
Appearance	White crystalline powder, free-flowing, no caking
Odor/Taste	Odorless, slightly salty mild acetic taste
Assay (Sodium Acetate)	≥ 99.0%
Loss on Drying	≤ 1.0%
pH Value (5% aqueous, 25°C)	7.5-9.0
Chloride (Cl ⁻)	≤ 0.005%
Sulfate (SO ₄ ²⁻)	≤ 0.005%
Heavy Metals (as Pb)	≤ 1 ppm
Arsenic (As)	≤ 0.5 ppm
Cadmium (Cd)	≤ 0.05 ppm
Mercury (Hg)	≤ 0.01 ppm
Iron (Fe)	≤ 0.001%
Calcium (Ca ²⁺)	≤ 0.005%
Total Bacterial Count	≤ 100 CFU/g
E. coli	Negative
Salmonella	Negative in 25g
Water Solubility (25°C)	≥ 46.5 g/100mL
Hygroscopy	Highly hygroscopic
Temperature Stability	Stable at 0-121 °C (food processing temperature)
pH Stability	Effective buffer in pH 4.0-9.0 food systems
Storage Stability	36 months unopened (≤25°C, RH ≤50%, sealed)

3. Product Advantages

1. **Multi-Functional Integration:** Integrates **acidity regulation, pH buffering, preservation, flavor improvement and metal sequestration** in one; replaces multiple single-function food additives, reduces production cost and formula complexity.



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>

- Excellent Buffer Capacity:** High-efficiency buffer in food pH 4.0-9.0 (optimal pH 6.0-8.0); stabilizes food acidity/alkalinity against raw material/processing changes, improves food shelf life and texture stability.
- Mild Preservative Effect:** Inhibits the growth of spoilage bacteria (E. coli, mold) at pH 5.0-7.0; synergizes with potassium sorbate/sodium benzoate to boost preservation effect (reduces preservative dosage by 30-40%).
- High Purity & Food Safety:** ≥99.0% purity, heavy metal/impurity content far lower than national/FCC/USP standards; FDA GRAS/EC E262 certified, no harmful byproducts; suitable for all population groups (infants, elderly, pregnant women).

4. Application Fields & Recommended Dosage

(Adjust dosage according to food type, pH adjustment target, preservation need and flavor requirement; all dosages are w/w based on food raw materials, no legal dosage limit (GMP compliance).)

Application Field	Typical Products	Recommended	Core Effect
Beverage	Carbonated drink, fruit	0.05-0.5%	pH buffering, taste improvement,
Dairy Products	Milk, yogurt, cheese, ice	0.03-0.3%	pH stabilization, texture
Meat Products	Sausage, ham, meatball,	0.1-0.8%	pH buffering, improve
Condiments	Soy sauce, oyster sauce,	0.08-0.6%	pH stabilization, flavor
Baked Goods	Bread, cake, biscuit,	0.02-0.2%	Dough pH adjustment, improve
Canned Food	Fruit/vegetable cans,	0.1-0.7%	pH buffering, preservation, anti-
Instant Food	Instant noodles, instant	0.05-0.4%	Flavor improvement, pH
Fermented Food	Vinegar, pickles, yogurt,	0.05-0.5%	Fermentation pH adjustment, boost
Snack Food	Potato chips, flavored	0.03-0.3%	Taste improvement, pH buffering,

5. Usage Methods & Formulation Guidelines

Key Storage/Handling Tip: Keep product dry at all times (hygroscopic); use dry equipment and avoid moisture contact to prevent caking.

- Dissolution Method:** For liquid food systems (beverage, sauce, soup), dissolve sodium acetate in food-grade deionized water (20-40°C) with stirring (10-20% stock solution); add the stock solution to food and mix evenly (no precipitation).
- Dry Mixing Method:** For solid food systems (baking flour, seasoning powder, instant food powder), premix sodium acetate with other dry food ingredients (sugar, starch, salt) at a ratio of 1:10-1:20; mix thoroughly to ensure uniform dispersion (avoid local high concentration).

6. Packaging, Storage & Transportation

- Small Packaging: 1 kg/5 kg food-grade aluminum foil bags (with desiccant inside, heat-sealed; for small food factories/laboratory use)
- Standard Packaging: 25 kg food-grade HDPE plastic drums (inner PE bag + desiccant, sealed cover; for industrial batch production)
- Bulk Packaging: 500 kg/1000 kg food-grade jumbo bags (moisture-proof film + desiccant, sealed; for large food factories/bulk purchase)
- **Labeling:** All packages are labeled with product name, CAS number, purity, "Keep Dry/Hygroscopic" warning and storage instructions.

7. Quality Assurance & Technical Support

- Production Standards:** Manufactured in a GMP/HACCP-compliant food-grade production workshop; neutralization, crystallization and drying processes meet ISO 9001 (Quality Management) and ISO 22000 (Food Safety) standards; raw materials are food-grade glacial acetic acid and sodium hydroxide (no industrial-grade ingredients).
- Batch Testing:** Every batch of sodium acetate is subject to **strict multi-index testing** (physical, chemical, microbiological, purity, heavy metals, pH); a detailed Certificate of Analysis (COA) is provided with each shipment to ensure compliance with GB 2760/FCC/USP/EC standards.