



TECHNICAL DATA SHEET

Product Name: Monosodium Fumarate

CAS No.: 7704-73-6

Molecular Formula: $C_4H_3NaO_4$

1. Product Description

Monosodium Fumarate is the monosodium salt of fumaric acid. It appears as a white crystalline powder or granules with high purity and good solubility in water. As a food additive, it functions mainly as an acid regulator, flavor enhancer, and buffering agent. It is widely used in beverages, bakery products, confectionery, dairy products, and nutritional supplements.

2. Specifications (Food Grade)

Item	Specification
Appearance	White crystalline powder/granules
Odor/Taste	Odorless or slight acidic taste
Identification	Positive for fumarate & sodium
Assay (on dry basis) $\geq \%$	98.0
Solubility	Freely soluble in water
pH (1.0g/30mL)	3.0-4.0
Moisture (Loss on drying) $\leq \%$	0.5
Heavy Metals (as Pb) $\leq \text{ppm}$	10
Lead (Pb) $\leq \text{ppm}$	5
Arsenic (As) $\leq \text{ppm}$	1
Cadmium (Cd) $\leq \text{ppm}$	1
Mercury (Hg) $\leq \text{ppm}$	0.1

3. Applications in Food Industry

Beverages: Acid regulator and flavor enhancer.

Bakery & Confectionery: Provides tart taste, improves dough stability.

Dairy Products: Enhances flavor, regulates acidity.

Nutritional Supplements: Used as pH adjuster and stabilizer.

Food Preservation: Acts as preservative and synergist with antioxidants.

4. Packaging

Standard: 25 kg paper bags or fiber drums with food-grade PE liner.

Customized packaging available upon request.

5. Storage & Shelf Life

Store in a cool, dry, and well-ventilated place.

Keep away from moisture, heat, and direct sunlight.

Shelf life: 24 months in original sealed packaging.



6. Safety Information

Approved as a food additive in many countries.

Safe at recommended levels (within FAO/WHO or local food additive standards).

Handle with clean, dry equipment under hygienic conditions.