



TECHNICAL DATA SHEET

Product Name: L-Malic Acid

CAS Number: 97-67-6

Molecular Formula: C₄H₆O₅

Molecular Weight: 134.09

EINECS No.: 202-601-5

EC Code: E296

1. Product Description

L-Malic Acid is a naturally occurring organic acid found in many fruits, especially apples. It appears as a white crystalline powder with a clean sour taste. Compared to DL-malic acid, L-malic acid is more physiologically compatible and offers a smoother, longer-lasting acidity. It is widely used as an acidulant, pH regulator, and flavor enhancer in food, beverages, pharmaceuticals, and personal care products.

2. Specification

Parameter	Specification
Appearance	White crystalline powder
Assay	≥ 99.0%
Specific Rotation	-1.6° to -2.6°
Loss on Drying	≤ 0.5%
Sulfate (SO ₄)	≤ 0.02%
Chloride (Cl)	≤ 0.004%
Fumaric Acid	≤ 1.0%
Maleic Acid	≤ 0.05%
Heavy Metals (Pb)	≤ 10 ppm
Arsenic (As)	≤ 2 ppm
Residue on Ignition	≤ 0.1%
Microbiological Standards	
Total Plate Count	≤ 1000 CFU/g
Yeast & Mold	≤ 100 CFU/g

Parameter	Specification
E. coli	Negative
Salmonella	Negative

3. Applications

- Beverages – soft drinks, fruit juices, energy drinks
 - Food industry – candies, jams, jellies, bakery products
 - Pharmaceutical applications – effervescent tablets, syrups
 - Personal care – cosmetics and oral care products
 - Functional foods – acidity regulation and flavor enhancement
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4. Packaging & Storage

- **Packaging:** 25 kg net weight per kraft paper bag with inner PE liner
 - **Shelf Life:** 24 months under proper storage conditions
 - **Storage Conditions:** Store in a cool, dry, and well-ventilated place, away from moisture and direct sunlight
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5. Regulatory Status

- Food grade, compliant with **FCC, USP, and EU E296 standards**
- Produced under ISO and HACCP-certified facilities
- Non-GMO, allergen-free, BSE/TSE-free