

SPECIFICATION

Product Name: DL- Malic Acid Food Grade
Chemical Formula: C ₄ H ₆ O ₅
CAS Number: 617-48-1
Molecular Weight: 134.09 g/mol
Appearance: White crystalline fine granular
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Assay on dried basis (Titrimetry)	%	99.79%	Min. 99.50
Maleic acid	%	0.037	Max. 0.05
Fumaric acid	%	0.62	Max. 1.0
Infrared absorption	-	Complies	The spectrum of the sample exhibits maxima at the same wavelengths as those in the spectrum of the reference standard.
Residue of ignition (Sulfated Ash)	%	0.01	Max. 0.10
Water insoluble matter	%	0.01	Max. 0.10
Specific rotation	-	+0.02	-0.10 to +0.10
Lead (as pb)	PPM	<2	Max. 2

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Soluble in ether.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.

- Storage Conditions: Store in a cool, dry, and well-ventilated place at 15–30°C. Protect from moisture, excessive humidity, and direct sunlight. Keep the container tightly closed in the original, properly labeled container to prevent moisture absorption and maintain product quality and stability. Store away from strong oxidizing agents and strong alkalis.

Applications

- Use: Widely used as an acidulant, flavor enhancer, pH regulator, buffering agent, and stabilizer in food, beverage, pharmaceutical, and nutraceutical formulations. It provides a smooth, long-lasting tart taste, enhances fruit flavors, and helps maintain product stability.

- Dosage: Depends on the intended application, desired acidity, flavor profile, and product formulation.

Packaging

- Standard Packing: 25 Kgs woven pp bag with inner liner or as per customer requirement.

- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.