



Food Grade Malic Acid – TDS

Product Description

Food Grade Malic Acid is a high-purity crystalline organic acid widely used as an acidulant, acidity regulator, and flavor enhancer in food and beverage manufacturing.

Its smooth and long-lasting tartness makes it particularly suitable for fruit beverages, confectionery, gummies, chewing gum, powdered drink mixes, jams, jellies, and fruit preparations.

Product Identification

Property	Information
Product Name	Food Grade Malic Acid
Chemical Name	2-Hydroxybutanedioic Acid
Food Additive Number	E296 / INS 296
Chemical Formula	C ₄ H ₆ O ₅
Molecular Weight	134.09 g/mol
CAS Number	6915-15-7
Appearance	White crystalline powder or granules
Odor	Practically odorless
Taste	Strong sour taste

Typical Technical Specifications

Parameter	Typical Specification
Assay	≥99.0%
Appearance	White crystalline powder or granules
Identification	Conforms
Solubility in Water	Highly soluble
Melting Range	Approx. 127–132°C
Residue on Ignition	≤0.10%
Fumaric Acid	Manufacturer dependent
Maleic Acid	Manufacturer dependent
Heavy Metals	According to food-grade specification
Lead	According to applicable food standard



Parameter	Typical Specification
Moisture / Loss on Drying	According to manufacturer specification

Specifications may vary according to manufacturer, production method, and destination-market requirements.

Functional Properties

Food Grade Malic Acid offers several useful formulation properties:

- Strong acidity control
- Long-lasting sourness
- Excellent water solubility
- Good compatibility with sweeteners and flavors
- Suitable for dry and liquid formulations
- Effective flavor enhancement
- Useful for fruit-flavored products
- Suitable for blending with other food acidulants

Main Applications

Food Grade Malic Acid is commonly used in:

- Carbonated beverages
- Fruit juices and fruit drinks
- Powdered drink mixes
- Energy and sports beverages
- Gummies
- Hard candies
- Sour candies
- Chewing gum
- Jams and jellies
- Fruit fillings
- Fruit preparations
- Dessert products
- Syrups
- Flavor systems



Function in Food Formulations

The main functions of Food Grade Malic Acid include:

Acidulant: Provides controlled acidity and sour flavor.

Acidity Regulator: Helps manufacturers adjust formulation pH.

Flavor Enhancer: Strengthens fruit flavors, particularly apple, berry, grape, cherry, and peach profiles.

Taste Balancer: Helps balance sweetness in sugar-rich formulations.

Packaging

Typical commercial packaging:

25 kg net bags

Alternative packaging may be available depending on supplier and order quantity.

Storage

Store Food Grade Malic Acid in a cool, dry, clean, and well-ventilated location.

Keep the packaging tightly sealed.

Protect the material from:

- Moisture
- Excessive heat
- Contamination
- Strongly reactive chemicals

Proper storage helps maintain product quality and free-flowing characteristics.

Shelf Life

Typical shelf life is commonly **up to 24 months** when stored in unopened original packaging under recommended storage conditions.



Always confirm the exact shelf life stated by the manufacturer.

Quality Documentation

Commercial buyers should request:

- Certificate of Analysis (COA)
- Safety Data Sheet (SDS/MSDS)
- Technical Data Sheet (TDS)
- Food-grade declaration
- Relevant quality or compliance certificates

Important Notice

The information above represents typical technical data for Food Grade Malic Acid. Actual specifications may vary by producer and batch.

Buyers should confirm the supplier's approved specification and Certificate of Analysis before commercial food production.