Malic acid - Applications

In Food Processing Industries Malic acid is the most preferred acidulant and flavour enhancer, for its rapid dissolution rate, its non-hygroscopic, free-flowing nature and compatibility with all types of fruits and flavours & for improving pH stability.

Beverages

- Carbonated Beverages
- Non-carbonated Beverages like Fruit drinks
- Powdered Mixes like Iced tea and dry soup mixes
- Sports drinks and enriched drinks,rich in calcium salts - to give clear solutions, without cloudiness
- Soft Drink Concentrates
- Low Calorie Beverages - to provide desired sourness and flavour at a higher pH.
- Apple cider - to maintain a consistent sharp taste
- Wines - to increase its flavour profile by malo-lactic fermentation
- Sugar cane juice - as a stabilizer
- Canned fruits and Vegetables - as anti-browning agent synergistic with Ascorbic acid

Confectioneries, preserves and bakery products and others

- Hard Candy, Pressed Candy – for increased shelf life since with low moisture level
- Soft Candies like agar, gelatin Pastilles or pectin-based candies such as jellies and gummies – for proper gelling and good product clarity
- Chewing gum
- Fruit fillings - in bakery products like Cookies, Snack bars, Pies, and Cakes
- Savoury snacks to impart taste and flavour
- Dairy foods
- Frozen desserts, sherbets, water ices and gelled desserts
- Edible oils and fats - in the control of oxidative rancidity, as a chelating agent, in de-gumming, as a bleaching and anti-emulsifying agent
- Pet foods - to obtain the pH required for jelling
- Ruminant feeds – as growth promoting, feed saving and effective milk promoting agent

Technical Applications

- Metal Cleaning and Electroplating
- For sanitation and scale removal in breweries, dairies and food plants
- Water treatment - for removal of hardness, Chelating agent in swimming pool
- Wash and wear, perma-press textile finishing
- Textile dying - improves the colour value, produces sharper prints
- Paint - to prevent formation of skin on top layer during storage
- Copying paper - to stabilize its heat-sensitiveness
- Cellulose nitrate lacquers - as an inhibitor of gelation
- Acrylic fibre - for stabilising the polymer

Pharmaceutical and Personal Care Products

- Throat lozenges
- Cough syrups
- Effervescent granulated preparations
- Tooth-cleaning preparations and mouthwashes - as it stimulates saliva flow
- Soaps, mouthwashes, and toothpaste – used in combination with germicidal compounds
- Skin care products- to rejuvenate and improve skin conditions
- Virucidal hand lotions
- As chelator of aluminum against toxic effects of aluminum
- In creams for treatment & cleansing of cuts, wounds and ulcers