

NuMalic[®]

L-Malic Acid



L-Malic Acid is the natural isomeric form of Malic Acid which is permitted for use in Organic Certified products. Unlike the more commonly used DL-Malic Acid which is a synthesized mixture of the naturally occurring and synthetic isomeric forms, NuMalic[®] L-Malic Acid is manufactured using an enzymatic fermentation process (not by chemical synthesis) and is nature-identical. NuMalic[®] L-Malic Acid is a Non-GMO Verified & Organic Compliant flavor enhancement option for use in a variety of food, confectionary and beverage applications.

Features & Benefits

Organic compliant – USDA NOP approved additive for organic certified products

Non-GMO Project Verified

Enhances the flavor of both natural and artificial flavors

pH buffer to maintain beverage pH

Suitable for use in acidified foods (pH<4.5)

Reduces bacterial growth – preservative action

Formulation

Water soluble odorless powder for easy formulation

Characteristic sour taste

pH between 2 and 4

Usage levels between 0.7% and 7%; typically 3%

Clean label: Label as NuMalic[®] L-Malic Acid (fermented)

Applications

Fruit & tea beverages

Fruit snacks, candies & gums

Fruit jam & filling

Powdered drink mixes

Wine production

Nutritional beverages

Pharmaceuticals

Certifications & Quality Assurance

Non-GMO Project Verified

Kosher & Halal Certified

USDA NOP Compliant for use in Organic Certified Products

Vegan/Vegetarian

Gluten-Free

Safety & Regulatory

L-Malic Acid is widely used in acidic liquid and semi-liquid foods and beverages and has no known oral toxicity. L-Malic Acid is FDA GRAS 21CFR184.1069 and is EU Food additive E269 compliant, where applicable. L-Malic Acid is USDA NOP organic compliant.

NuMalic[®]

L-Malic Acid



L-Malic Acid is the natural isomeric form of Malic Acid. It is a Krebs cycle intermediate catalyst in the mitochondria and has great potential for use as an inexpensive, effective dietary ingredient. Malic Acid has been shown to have positive effects on fatigue, mental focus, muscle pain, recovery, energy, and detoxification.

NuMalic[®] L-Malic Acid is manufactured using an enzymatic fermentation process (not by chemical synthesis). It is pure, Non-GMO Project Verified and Organic Compliant.

Applications

Functional foods & beverages

Dietary supplements – tablets, capsules, liquids

Performance formulations

Candies & gums

Creams & topicals

Structure/Function Claims

May improve cognitive focus

Aids in energy production and muscle recovery

In combination with Magnesium, may reduce muscle pain

Supports detoxification

Formulating with NuMalic[®]

NuMalic[®] L-Malic Acid is a water-soluble crystalline powder that is recommended for use as a single, active, dietary ingredient at 500+ mg /day. It can be used in combination with other active ingredients to create unique formulas for the following applications:

Mitochondrial function – increases NAD+ availability and increases NADPH

Sports performance – energy production, muscle recovery and pain

Muscle pain – clinical trials on the use of 1,200 to 2,800 mg L-Malic Acid in conjunction with 300 to 600 mg Magnesium have shown significant effects in reducing muscle pain in subjects with fibromyalgia and chronic fatigue syndrome

Mental focus – L-Malic Acid supplementation may help to improve cognitive function, as demonstrated in a study of sleep-deprived animals

Muscle recovery – L-Malic Acid aids in muscle recovery by counteracting the build-up of Lactic Acid

Detoxification – L-Malic Acid is a heavy metal chelator which means it binds to metals such as lead, cadmium, arsenic and mercury. Studies have shown it binds well to Aluminum and could mitigate Aluminum toxicity

Kidney stones – L-Malic Acid is a precursor to citrate. Citrate binds to calcium and may help keep calcium from binding to other substances in kidney stones

Toothpastes and mouthwashes – stimulates saliva production and therefore helps reduce bacterial levels in the mouth

Tel: (203) 372-8877 | Sales@NutriScienceUSA.com

NutriScienceUSA.com | Fax: (203) 372-9977


NutriScience
Ingredients Matter.

© 2019 NutriScience Innovations, LLC. The information contained herein is intended for business-to-business purposes only and is not intended for consumers or other third parties. NutriScience Innovations, LLC does not sell products to consumers. This information may not be reproduced in whole or part without the express written permission of NutriScience Innovations, LLC. Although the information provided is, to the best of our knowledge, truthful and accurate, NutriScience Innovations, LLC does not guarantee its accuracy and provides no express or implied warranties. NutriScience Innovations, LLC assumes no responsibility for buyer's use of structure/function and product claims. Companies must consult with legal counsel to ensure that such claims are lawful. The statements contained herein have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.

NuMalic[®] is a registered trademark of NutriScience Innovations, LLC.

REV 012420