Import and distribution for Serbia: Farmadria DOO
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TECHNICAL DATA SHEET

Product Name: Citric Acid

INCI Name: Citric Acid, monohydrate

CAS Number: 5949-29-1

Chemical Classification: Carboxylic acid/derivative

Functional Category: pH regulator/buffering agent; chelating agent/sequestrant

IUPAC Name: 2-hydroxypropane-1,2,3-tricarboxylic acid; hydrate

Description: Citric acid is a weak organic acid naturally found in citrus fruits (5–6% in lemon juice). In cosmetics, it is used as a pH regulator, chelating agent, and preservative. It acts as a mild exfoliant, removing dead skin cells, improving texture, and leaving skin smoother and more refreshed. Thanks to its chelating properties, it binds metal ions, prevents oxidation, and extends the shelf life of products. Frequently included in formulations for skin brightening, it helps reduce discoloration and evens out skin tone. Besides its functional roles, it stabilizes fragrance and color, enhancing the product's sensory appeal. It is suitable for a wide range of cosmetic products, including creams, serums, shampoos, and body washes, and is compatible with numerous raw materials. It appears as a white crystalline substance with a sour taste, easily soluble in water. Industrially, citric acid is obtained from lemons, primarily in southern Italy and California, or through sugar fermentation using the mold Aspergillus niger. Its salts are known as citrates. pH Value: 2.2 (1.0% solution)

Benefits:

- ***Acidulant:*** Lowers the pH of the final product.
- ***Chelating effect:*** Enhances the activity of antioxidants and preservatives.
- ***Buffering effect:*** Maintains pH between 2.5 and 6.5, stabilizing active ingredients.
- ***AHA properties at higher concentrations:*** Promotes hydration, exfoliation, smoothing, and anti-aging effects. Stimulates collagen production.

Disclaimer: The details provided here are specific to the identified material and may not remain accurate if that material is combined with other substances or used in different processes. The information presented is, to the best of the company's knowledge, considered precise and trustworthy as of the date mentioned. However, the company does not make any explicit or implied assurance, guarantee, or claim regarding the information's precision, trustworthiness, or comprehensiveness, and will not be held accountable for any losses, damages, or costs, whether direct or indirect, that arise from its use. Users are encouraged to independently verify the appropriateness and thoroughness of this information for their specific purposes.

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Usage: pH regulation: Typically added at 0.1%–0.5% concentrations to achieve optimal acidity, enhancing stability and efficacy of active ingredients while maintaining product consistency. Exfoliation: Used at 3%–10%, depending on skin tolerance and desired exfoliation intensity. Often combined with other AHAs, such as glycolic or lactic acid, to enhance the removal of dead skin cells and improve texture. Skin brightening: At 2%–5%, it reduces discoloration and promotes even skin tone without irritation. Hair and body care products: In shampoos and body washes, it is used at 0.2%–0.3%, preventing mineral salt deposition, maintaining clarity, and extending shelf life. Precise measurement and dilution are crucial for safety and formulation stability. pH adjustment with a pH meter or appropriate indicators is mandatory to ensure the desired effect and prevent irritation.

Source Materials: Derived from molasses or hydrolyzed corn starch and calcium hydroxide.

Animal Testing: Not tested on animals.

GMO: Non-GMO.

Vegan: Contains no animal-derived components.

Raw Material Origin: Italy

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