



Ethyl Ascorbic Acid

Description

Vitamin C (ascorbic acid) is a normal constituent of human skin, and is concentrated in the dermis and epidermis. It is one of the most widely used antioxidants for protecting the skin. Vitamin C can inhibit the activity of tyrosinase and therefore decreases the melanin production. In addition, vitamin C is important to help protect the skin against UV-induced free radical damage that is related to skin aging. Unfortunately, pure vitamin C is not stable in cosmetic formulations and easily oxidized when exposed to air or light. To avoid this oxidation process and to provide the maximum benefit of vitamin C, it is recommended to use a stable form of vitamin C in personal care preparations.

Ethyl Ascorbic Acid is an etherified derivative of ascorbic acid, one of the most stable derivatives of ascorbic acid known. It is also showing a very good stability in all kinds of cosmetic formulations. Ethyl Ascorbic Acid penetrates into the skin and there it is metabolized to ascorbic acid. Due to this process its efficacy is better than the one of pure ascorbic acid. It resists discoloration and degradation, while retaining all biological activity of L-ascorbic acid.

Efficacy

- decreases the generation of melanin by inhibition of tyrosinase activity
- acts as an antioxidant
- decreases wrinkle progression
- reduces fine lines
- improves skin lightening
- improves radiance and an even skin tone
- increases collagen production
- reduces and repairs sun damages on the skin

Appearance

white to off-white crystal powder

INCI

3-O-Ethyl Ascorbic Acid

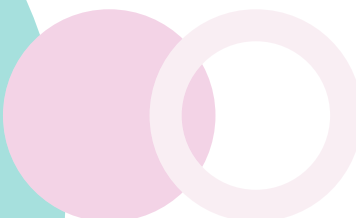
Registration

CAS-No.....86404-04-8
EC-No.....-/-

Raw material approved by ECOCERT GREENLIFE, conform to the COSMOS Standard.

Preservatives / Stabilizers

none

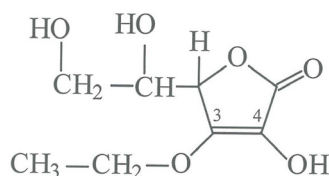


Nature needs no cosmetics,
but cosmetics need nature

Ethyl Ascorbic Acid

Characteristics

assay.....>= 98.5 %
pH-value (3 % water solution).....3.5 - 5
melting point.....111 - 115°C



molecular formula.....C₈H₁₂O₆
molecular weight.....204.18 g/mol

Application

high quality cosmetic products
creams and lotions
face masks
gel and ampoules

Application concentration

skin care formulations.....0.1 - 3 %

Incorporation

Ethyl Ascorbic Acid can easily be incorporated in cosmetic emulsion and other formulations. It is water soluble. The recommended pH range is 3.5 - 6.

For better stability and to avoid pH-drift to acidic pH-values the use of 1 % citrate buffer is recommended.

Ethyl Ascorbic Acid is stable for more than 90 days under different conditions (45°C, -15°C, room temperature and under day light).

Toxicology

non hazardous in normal use concentration
pure raw material can cause serious eye irritation

Storage & Shelf life

Ethyl Ascorbic Acid should be stored in sealed containers at a cool, dry and light protected place at 10 - 25°C.

In closed original containers the shelf life is 24 months.