

Carri-Active[®] Ethyl Ascorbic Acid

Description

Carrier systems with the ability to transport actives into the skin are playing an important role in cosmetics already for a long time. The most well-known carrier systems belong to the group of liposomes or nanosomes-vesicles which consist of purified phospholipids from soya. Liposomes have an aqueous core whereas nanosomes internally consist of oil and lipophilic actives. Our new innovative delivery system has been developed together with company Sopharcos. CARRI-ACTIVE[®] have similar or even better properties compared to the familiar liposomes and nanosomes. In our CARRI-ACTIVE[®] we can encapsulate either hydrophilic substances of different molecular weights, or we can encapsulate lipophilic components. The carrier system was investigated ex-vivo and in-vivo on human skin and an improved penetration efficacy has been proved.

To ensure effectiveness of the cosmetic formulation, the actives have to be transported to the target site, mostly into the epidermis. CARRI-ACTIVE[®] Ethyl Ascorbic Acid is a water-dispersed carrier system (water- in oil-in-water-emulsions) that contains 5 % Ethyl Ascorbic Acid.

Ethyl Ascorbic Acid is an etherified derivative of ascorbic acid, one of the most stable derivate of ascorbic acid known. It is also showing a very good stability in all kinds of cosmetic formulations. CARRI-ACTIVE[®] Ethyl Ascorbic Acid penetrates skin and releases Ethyl Ascorbic Acid. This active molecule might be able to be metabolized to ascorbic acid. Due to this process its efficacy is more pronounced than the one of pure Ascorbic Acid.

Efficacy

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

Appearance

cream white, slightly viscous solution

INCI

Aqua, Glyceryl Citrate / Lactate / Linoleate / Oleate, 3-O-Ethyl Ascorbic Acid, Ethyl Oleate



Nature needs no cosmetics,
but cosmetics need nature

Carri-Active[®] Ethyl Ascorbic Acid

Registration

CAS-No.
 Aqua.....7732-18-5
 Glyceryl Citrate/Lactate/Linoleate/Oleate.....
9174-23-9
 3-O-Ethyl Ascorbic Acid.....86404-04-8
 Pentylene Glycol.....5343-92-0
 Ethyl Oleate.....111-62-6

EC-No.
 Aqua.....231-791-2
 Glyceryl Citrate/Lactate/Linoleate/Oleate.....
294-585-1
 3-O-Ethyl Ascorbic Acid.....-/-
 Pentylene Glycol.....226-285-3
 Ethyl Oleate.....203-8889-5

Preservatives / Stabilizers

preservative.....none
 stabilizer Pentylene Glycol.....5 %

Characteristics

content Ethyl Ascorbic Acid.....~ 5 %
 pH value.....5.0 - 6.0
 mean particle size.....150 - 350 nm
 polydispersity index (PDI).....< 0.4

Application

daily cosmetics
 creams and lotions
 eye care
 face masks
 gels and ampoules

Application concentration

skin care formulations.....0.2 - 5 %
 skin whitening products.....1 - 5 %

Incorporation

Shake the dispersion before use!
 CARRI-ACTIVE[®] Ethyl Ascorbic Acid can easily be incorporated into final formulation at 30 °C under stirring.

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

CARRI-ACTIVE[®] Ethyl Ascorbic Acid should be stored in original sealed containers in a dry and well-ventilated, cool place at temperatures between 2 - 8 °C. Brief exposure up to 40 °C possible.
 Exposure to UV-rays should be avoided.

In sealed containers CARRI-ACTIVE[®] Ethyl Ascorbic Acid have a stability of 6 months.