

18-β-Glycyrrhetic Acid

Description

18-β-Glycyrrhetic Acid is obtained by hydrolysis of glycyrrhizic acid extracted from the roots of liquorice (*Glycyrrhiza glabra*). The most important active ingredients of liquorice are saponins of triterpens with a concentration of 5 - 15 %. The structure of 18-β-Glycyrrhetic Acid is similar to cortisol which might be the reason for its anti-inflammatory efficacy. It even increases the anti-inflammatory efficacy of cortisol by inhibiting its inactivation. 18-β-Glycyrrhetic Acid also has multiple pharmacological properties when applied orally or topical. It is effective in the treatment of peptic ulcers, has expectorant (antitussive) activity, it has antiviral, antifungal and antibacterial activities. The multifunctionality of this active ingredient makes it so interesting for a number of cosmetic formulations.

18-β-Glycyrrhetic Acid can be used in liquid cosmetics like face lotions and perfumes in order to avoid or reduce allergic reactions and to refresh the skin. In skin care products like creams and masks 18-β-Glycyrrhetic Acid soothes and refreshes the skin. 18-β-Glycyrrhetic Acid also has been approved for treatment of red, rough and chapped skin. It is also used for therapy of dermatopathia causing a soothing and healing effect. Further 18-β-Glycyrrhetic Acid can be applied to support the long-term therapy with cortisone to reduce the negative side effects of cortisone.

Efficacy

- reduces inflammations
- reduces erythema and supports wound healing
- acts soothing and refreshing
- acts as an anti-irritant
- reduces itching and allergic reactions
- shows antiviral, antibacterial and antifungal properties
- shows antiphlogistic effects

Appearance

white powder

INCI

Glycyrrhetic Acid

Registration

CAS-No.....471-53-4

EC-No.....207-444-6

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



Nature needs no cosmetics,
but cosmetics need nature

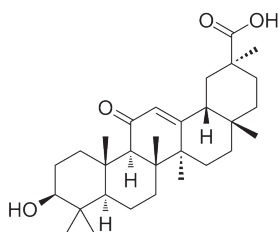
18-β-Glycyrrhetic Acid

Preservatives / Stabilizers

none

Characteristics

purity (assay).....>= 97.0 %
 loss on drying.....<= 1.0 %
 residue on ignition.....<= 0.1 %



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molecular formula.....C₃₀H₄₆O₄
 molecular weight.....470.68 g/mol⁻¹
 synonym.....glycyrrhetin

Application

creams and lotions
 face masks
 gels and ampoules
 dermatological treatments
 sensitive care
 dental care

Application concentration

skin care formulations.....0.5 - 1 %
 dental care formulations.....0.5 - 1 %
 dermatological care.....0.5 - 1 %

Incorporation

18-β-Glycyrrhetic Acid is slightly soluble in hot water and phenethyl alcohol, very slightly soluble in anhydrous ethanol (up to 0.6 %) and in propylene glycol (up to 0.1 %). It is insoluble in plant oils and paraffin.

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

18-β-Glycyrrhetic Acid should be stored in sealed containers at a dry place with good ventilation at 10 - 25°C. The direct influence of UV rays during a long time should be avoided.

In closed original containers the shelf life is 48 months.