

AMMONIUM GLYCYRRHIZATE

PRODUCT INFORMATION:

Ammonium glycyrrhizate is obtained from the licorice root (*Glycyrrhiza glabra* L.) by extraction and purification methods.



Mixture of ammonium 18 α - and 18 β -glycyrrhizate (ammonium salt of (20 β)-3 β -[[2-O-(β -D-glucopyranosyluronic acid)- α -D-glucopyranosyluronic acid]oxy]-11-oxoolean-12-en-29-oic acid), the 18 β -isomer being the main component.

Ammonium glycyrrhizate complies with the current monograph "1772: *Ammonium glycyrrhizate*" of the European Pharmacopoeia with a content of 98.0 to 102.0 % (anhydrous substance)

INCI Name: AMMONIUM GLYCYRRHIZATE

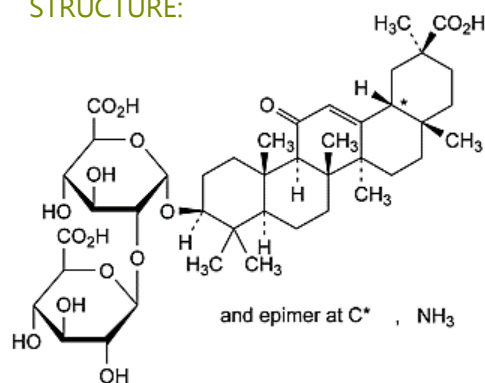
CAS: 53956-04-0

EINECS: 258-887-7

Molecular formula: C₄₂H₆₅NO₁₆

Relative molecular weight: 840 g/mol

STRUCTURE:



PRODUCT CHARACTERS:

- Appearance: White or yellowish-white, hygroscopic powder.
- Solubility: slightly soluble in water (soluble in hot water). Very slightly soluble in anhydrous ethanol, practically insoluble in acetone. Soluble in hydroalcoholic mixtures, in glycerin, and in propylene glycol. Not soluble in oily phases (caprylic/capric triglycerides).
- Taste: Sweet taste (33-200 times sweeter than sucrose)

PRODUCT PROPERTIES:

▪ Flavouring substance:

Ammonium glycyrrhizate is listed either Food Chemical Codex or Codex Alimentarius.

Europe: Ammonium Glycyrrhizate is included in the Community Register on flavourings and certain food ingredients with flavouring properties for use in and on foods (Commission Implementing Regulation (EU) No 872/2012 and Annex I to Regulation (EC) No 1334/2008).

USA: Food and Drug Administration (FDA) includes licorice and licorice derivatives (Monoammonium glycyrrhizate) on its list of substances considered Generally Recognized as Safe (GRAS) (21 CFR Parts 184 GRAS Status of licorice and licorice derivatives).

▪ **Anti-inflammatory activity:**

Ammonium glycyrrhizate exhibits anti-inflammatory activity due to glycyrrhizic acid, the active component. Glycyrrhizic acid inhibits the activity of the phospholipase A2 that plays an important role in various inflammatory processes. Moreover, glycyrrhizic acid inhibits cyclooxygenase activity and the formation of prostaglandins.

▪ **Smoothing and calming**

▪ **Skin conditioning**

▪ **Anti-seborrheic**

PRODUCT APPLICATIONS

Due to the SWEET TASTE of the product, it can be formulated in tablets, toothpaste, lip balms and other products to mask unpleasant flavours.

Ammonium glycyrrhizate is an active ingredient for skin care, baby care and body care products. It can be formulated also in dental hygiene and protection products.

Given its anti-inflammatory and anti-seborrheic properties, Ammonium glycyrrhizate is indicated in the treatment of:

- Inflammations of skin as wounds, eczema, and burns.
- Greasy hair
- Gingival inflammations

DOSAGE AND FORMULATION:

Recommended dosage: 0.5-1.0%

Preventive measures: Incorporate Ammonium glycyrrhizate in water phases (see solubility in product characters section).

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