

Salicylic Acid natural

Description

The history of salicylic acid goes back a long way. Even in ancient Egypt, Greece and Rome, recipes made from plants containing salicylic acid, especially willow bark, were used to combat fever and pain. The name of salicylic acid is derived from the botanical name of willow (*Salix alba* = white willow), from that bark extract the substance was first isolated in 1828 by the German chemist Johann Andreas Buchner. Other researchers isolated the acid from meadowsweet (*Filipendula*, also known as *Spirea*) and called it spiral acid.

Salicylic acid, also called o-hydroxybenzoic acid, occurs in free form, esterified and partly glycosidic bound, in essential oils and as a plant hormone in the leaves, flowers and roots of various plants (willows, poplars, holly, kiwi fruit, oaks, violets, especially in American wintergreen). It is of great importance against the defence of pathogenic substances. Salicylic Acid natural is one of the most effective skin care ingredients used to treat and prevent acne. It is one of the longest medically used active ingredients. Salicylic Acid natural has an analgesic, antiinflammatory, antibacterial and kera-tolytic effect and is therefore contained in skin ointments and creams. In low doses it is also used to flavour toothpastes and chewing gum, among other things. Salicylic Acid natural acts as a vegetable germination inhibitor and is therefore also used as a preservative. At the same time, it stimulates the regeneration of the underlying skin layer.

Efficacy

- shows strong exfoliating effects (peeling)
- removes dead cells
- reduces inflammations
- inhibits sebum secretion
- shows good effect on melasma (hyperpigmen-tation) and post-inflammatory pigmentation
- acts antimicrobial
- helps to reduce sings of photoaging
- helps to get and maintain clear pores
- suitable as anti-acne cleanser and anti-dandruff agent

Appearance

white to slightly yellowish powder

INCI

Salicylic Acid

Registration

CAS-No.....69-72-7

EC-No.....200-712-3

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

Preservatives / Stabilizers

none

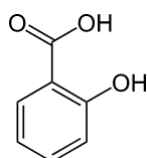


Nature needs no cosmetics,
but cosmetics need nature

Salicylic Acid natural

Characteristics

assay.....>= 99 %
melting point.....158 °C - 161 °C



©deacademic.com

molecular formula.....C₇H₆O₃
molecular weight.....138.12 g/mol
synonym.....2-hydroxybenzoic acid

Application

high quality cosmetic products
daily care products
creams and lotions
face masks
gels and ampoules
facial cleanser
hair care
medical applications
dermatological applications

Application concentration

skin care formulations.....0.5 - 2 %
hair care formulations.....0.1 - 3 %
as preservative.....<= 0.5 %
medical applications.....15 - 40 %

Salicylic acid is banned in cosmetics for children under 3 years. For ages 3 - 10: max. 0.5 %
rinse-off, 0.15 % leave-on, 0.1 % oral care

Incorporation

Salicylic Acid natural can easily be incorporated in pure ethanol (14 %) and in 20 % ethanol (around 0.5 %). In glycerine you can solubilize around 1.6 % and in octyldodecanol 15 - 20 %.

Salicylic Acid natural is incompatible with various active ingredients f.e.: retinoids and tretinoin, camphor, chloral hydrate, iron salts, gelatin, iodine, iodide, iodoform, beta-naphthol, polyethylene glycol, resorcinol and zinc oxide.

Salicylic Acid natural gradually discolors in sunlight; when heated to decompose it emits acrid smoke and irritating fumes.

To prevent recrystallisation we recommend to first solve 2 % Salicylic Acid natural in 14g Ethanol abs. (add water to 100mL), adjust pH to 11 with Sodium hydroxide solution (20 % in water) and slightly warm the solution, afterwards adjust final pH to 4 - 5 with Citric Acid solution 10 % in water (direct adjustment to pH 4 - 5 does not prevent crystallization).

Toxicology

non hazardous in normal use concentration
pure raw material is harmful if swallowed, causes serious eye damage and is suspected of damaging the unborn child

Salicylic Acid natural can enhance the penetration of medical substances (toxic risk of methotrexate, sulfonyleurea).

Due to these interactions with various substances, we highly recommend checking possible incompatibilities prior to formulation.

Storage & Shelf life

Salicylic Acid natural 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.