

Konjac Mannan 1.0 natural

Description

Konjac Mannan 1.0 natural is a 1.0 % glucomannan solution obtained from an Asiatic tuber called *Amorphophallus konjac*. This product is free of preservatives. The dried tuber of konjac plant contains about 60 - 80 % konjac flour. Through a specific extraction process of this flour, we are able to offer a 1 % glucomannan solution. It contains a high molecular weight glucomannan consisting of mannose and glucose in a molar ration of 8:5 with beta-1,4-linkages and a molecular weight higher than 300.000 Daltons. For more than thousand years Konjac Mannan is used as well as food additive for example in glass noodles or as stabilizing agent. Konjac Mannan 1.0 natural has a very good pH stability from 2 - 7, it is thermostable up to 70 - 90 °C and forms very interesting synergistic gels with other natural thickeners and acrylates. Due to a slightly different production process Konjac Mannan natural is the competitive alternative to Konjac Mannan 1.0 natural for use in liquid formulations like body lotions and shower gels.

The pure powder of Konjac Mannan is an excellent natural thickener for water based formulations. During production the tubers are ground and purified mechanically. The Konjac flour is then washed and by thick extraction with alcohol the Konjac Mannan powder is obtained. We use this very pure Konjac Mannan powder to prepare a 1 % solution of this excellent moisturizer. The extremely long filamentous macromolecules swell up to 200 times of their original volume resulting in this highly viscous liquid. Konjac Mannan 1.0 natural is eminently suitable for use in face creams, face masks, ampoules, body lotions, sun protection lotions, after-sun lotions and shower gels.

Efficacy

- acts as a moisturizer: **0.7 % Konjac Mannan gel powder improved skin hydration up to 15 %**
- acts as a natural thickener: **1 % Konjac Mannan gel powder in water achieves a viscosity of 16.000 mPa s**
- offers a protective film
- shows outstanding pH stability (2 - 7)

Please have a look at our
Leaflet_2034_Efficacy_e for more details.

Appearance

nearly clear to opaque viscous liquid

INCI

Aqua, Glucomannan or *Amorphophallus Konjac*
Root Extract

Registration

CAS-No.:
Aqua.....7732-18-5
Glucomannan or *Amorphophallus Konjac*
Extract.....37220-17-0
Pentylene glycol.....5343-92-0
Glyceryl caprylate.....26402-26-6



Nature needs no cosmetics,
but cosmetics need nature

Konjac Mannan 1.0 natural

EC-No.:

Aqua.....	231-791-2
Glucomannan or Amorphophallus Konjac Root Extract.....	253-404-6
Pentylene glycol.....	226-285-3
Glyceryl caprylate.....	47-668-1

Application concentration

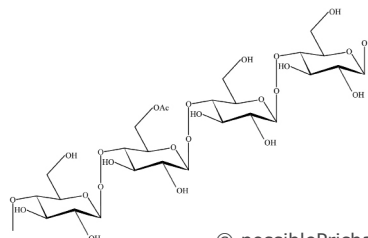
skin care formulation.....	1 - 5 %
shower gels.....	1 - 3 %
hydrogels.....	10 - 20 %

Preservatives / Stabilizers

preservative.....	none
stabilizer	
Pentylene Glycol.....	3 %
Glyceryl Caprylate.....	0.2 %

Characteristics

content of polysaccharides.....	0.75 - 1.05 %
dry residue.....	0.95 - 1.40 %
pH-value.....	3.50 - 4.20



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Application

daily cosmetic products
creams and lotions
face masks
gels and ampoules
body care
after sun care
after shave
sensitive care
baby care

Incorporation

Konjac Mannan 1.0 natural can easily be incorporated into the water phase of a cosmetic product at temperatures up to 90 °C. Konjac Mannan 1.0 natural is compatible with ethanol up to 10 %. Precipitation by ethanol with concentrations above 10 %.

Excellent stability in combination with the self-tanning agent Dihydroxyacetone (DHA) at pH values 2 - 4 with alpha-Hydroxyacids (AHA).

To obtain very stable and high viscous gels we highly recommend combination of Genuvisco® carrageenan CG-131 from Kelco

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

Konjac Mannan 1.0 natural should be stored in a dry and light protected place at 10 - 25 °C.

In closed original containers the shelf life is 24 months.