

Konjac Mannan 1.0 SP PHE

Description

Konjac Mannan 1.0 SP PHE is a 1.0 % glucomannan solution obtained from an asiatic tuber called *Amorphophallus konjac*. This product is free of parabens and preserved only with phenoxyethanol. 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 SP PHE 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 1.0 SP PHE is the competitive alternative to Konjac Mannan 1.0 PHE 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 SP PHE 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, strong viscous liquid

INCI

Aqua, Glucomannan or *Amorphophallus Konjac Root Extract*

Registration

CAS-No.:

Aqua.....	7732-18-5
<i>Amorphophallus Konjac Root Extract</i> ..	37220-17-0
Phenoxyethanol.....	122-99-6

EC-No.:

Aqua.....	231-791-2
<i>Amorphophallus Konjac Root Extract</i> ..	253-404-6
Phenoxyethanol.....	204-589-7



Nature needs no cosmetics,
but cosmetics need nature

Konjac Mannan 1.0 SP PHE

Preservatives / Stabilizers

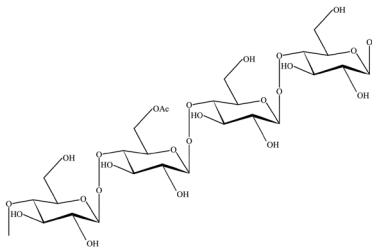
preservative Phenoxyethanol.....0.85 %
 stabilizer.....none

Application concentration

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

Characteristics

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



© possiblePricha/shutterstock.com

Incorporation

Konjac Mannan 1.0 SP PHE can easily be incorporated into the water phase of a cosmetic product at temperatures up to 90°C. Konjac Mannan 1.0 SP PHE 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.

Application

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

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

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

In closed original containers the shelf life is five years.