

Phytosterol Complex 95 %

Description

Phytosterols are important ingredients of plants. They are structural components of the cell membrane, analogue to cholesterol in human cells. They mainly occur in the lipophilic parts of plants for example seeds. As part of human food phytosterols pass into blood circulation and are stored in the skin lipid bilayer, where they are responsible for structuring and stabilization. As natural emulsifier they are able to form together with other components lipidic protection films on skin and hair. In addition phytosterols are known to be anti-irritant, they are able to reduce erythema and itching.

Phytosterol Complex 95 % was developed based on the idea to offer a natural protective agent that is able to repair damaged skin and to safeguard intact skin.



©Vasilius/Fotolia.com

Appearance

white to yellow-amber powder

INCI

Glycine Soja Sterols

Registration

CAS-No.....-/-
EINECS-No.....-/-
JCIC.....Phytosterol

Preservatives / Stabilizers

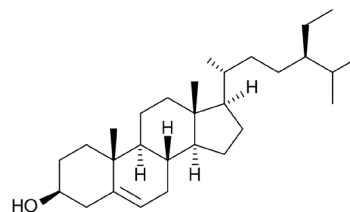
none

Effects

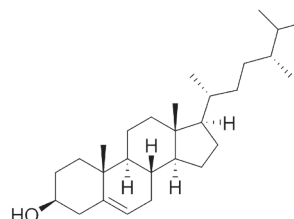
- sebum regulation: Application of **0.5 % Phytosterol Complex 95 %** reduced sebum production by **13.7 %**
- anti-inflammatory effect: Application of **Phytosterol Complex 95 %** showed a great reduction of IL-6 production by **134 %**
- skin barrier function: Application of a lotion containing **0.5 % Phytosterol Complex 95 %** showed a pronounced effect on regenerating skin barrier function by **90 %** after 96h

Please have a look at our Leaflet_7265_Efficacy_e for more details.

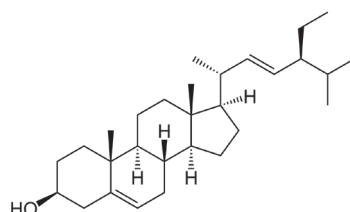
Chemical Structure



Beta-Sitosterol



Campesterol



Stigmasterol

Molecular Weight.....approx. 400 g/mol

Phytosterol Complex 95 %

Characteristics

total Phytosterols.....	≥ 95 %
Beta-Sitosterol.....	≥ 40 %
Campesterol.....	15 % - 30 %
Stigmasterol.....	15 % - 30 %
Brassicasterol.....	≤ 10 %

total bacterial count.....	≤ 1.000 CFU / g
yeasts and moulds.....	≤ 100 CFU / g

Product is GMO-free according to EU-directives 1829/2003 and 1830/2003.

Application

Healthy cells of skin can be damaged by a number of extrinsic pollutants. Due to this process cell membrane components like arachidonic acid are released and changed into reactive metabolic substances. Among others also Leucotrienes are formed, which are strong mediators of inflammatory processes. They are also involved in the beginning and persistence of dermatitis. Phytosterols are able to influence the inflammation cascade and neutralize the undesired reactions of Leucotrienes. Phytosterols have a high potential to care dry and itchy skin which is close to eczema or atopic dermatitis. They even repair defect skin lipid bilayers and were in a number of cases more effective than cortisone without showing its unwanted side effects.

Their anti-irritant and anti-itching effect is appreciated for daily skin care, sun creams, lip sticks, pre- and after-shaves, for the care of very dry skin as well as for dermatological products.

Application concentrations

Daily Skin Creams.....	0.05 - 0.2 %
After Sun Treatment.....	0.02 - 0.5 %
After Shave Preparations.....	0.02 - 0.5 %
Sensitive Skin Treatment.....	0.02 - 0.5 %

Dermatological Products.....	1.0 - 2.0 %
Shampoos for damaged and dry hair.....	0.05 - 0.2 %

Incorporation

Phytosterol Complex 95 % can be incorporated in the oil phase by first dissolving at 50°C with gentle agitation. Phytosterol Complex 95 % is insoluble in water.

Solubility

plant oils (50°C).....	very soluble
water.....	insoluble

Toxicology

non-irritating to skin and eyes
non-toxic

Storage & Shelf life

Phytosterol Complex 95 % should be stored light protected at 10°C - 25°C.

Shelf life in sealed containers is 24 months.

Selco Wirkstoffe Vertriebs GmbH

Straßburg 16
69483 Wald-Michelbach / Germany
Telefon +49 6207 922 80
Telefax +49 6207 922 810
www.gfn-selco.de
info@gfn-selco.de

Leaflet_7265_e
27.01.2020