

Elastin PHE

Description

Elastin, like collagen, belongs to the group of scleroproteins. It is a key protein that derives from connective tissue. As the name suggests, elastin provides the skin with the ability to go back to its original shape after being stretched or pulled. Elastin is found in our artery walls, intestines, lungs, and of course skin. Elastin is 1000 times more flexible than collagen. Its rubber band-like nature is essential in helping us convey expressions. In the body, elastin is associated with other proteins in a functional network. Elastin fibers are bundles of proteins (amorphous elastin) and fibrous fibrillin, which are produced by a number of different cell types including fibroblasts. The harmful rays of the sun can damage the elastin in your skin which becomes more apparent as you age. This process breakdowns the elastic, causing the skin to sag and stretch, ultimately losing some of its ability to "snap back."

Elastin PHE is an aqueous solution out from bovine ligaments (Ligamentum nuchae). This product contains hydrolyzed elastin, desamido collagen, mucopolysaccharides and triglycerides. Elastin PHE shows an excellent water binding capacity. The additional components gained from the ligaments like triglycerides and mucopolysaccharides are beneficial for the skin and give a nice skin feel. Important for the usage in hair cosmetics is the outstanding ability to draw on hair. After treatment with an elastin containing shampoo the hair has better form and more volume. The swelling of hair and skin due to alkaline treatment is extremely repelled and therefore skin and hair are very well protected against surfactants. The protection mechanism can be made visible by a significant delay of the swelling degree at hair under alkali conditions.

Efficacy

- shows a build-up effect on the hair
- acts as a natural conditioning agent and strengthens the hair
- shows a significant delay of swelling degree on hair during alkaline process (perms and dying)
- reduces breakage of hair
- improves skin elasticity
- helps to prevent dry skin
- reduces wrinkles and delays aging

Appearance

yellow, opaque, slight viscous solution

INCI

Aqua, Hydrolyzed Elastin, Desamido Collagen

Registration

CAS No.:

Aqua.....7732-18-5

Hydrolyzed Elastin.....91080-18-1

Desamido Collagen.....-/-

EC No.:

Aqua.....231-791-2

Hydrolyzed Elastin.....293-509-4

Desamido Collagen.....-/-



Nature needs no cosmetics,
but cosmetics need nature

Elastin PHE

Preservatives / Stabilizers

preservative Phenoxyethanol.....0.95 %
stabilizer.....none

Characteristics

content Elastin.....1.10 - 3.90 %
content Desamido Collagen.....0.10 - 0.60 %
total N₂.....0.30 - 0.70 %
content proteins out of N₂ (F=5,71)
.....1.70 - 4 %
molecular weight Elastin.....5 000 - 30 000 Da
density.....1.00 - 1.10 g/ml
pH value.....6.50 - 8.50
salts NaCl.....1 - 3 %

Application

daily cosmetic products
creams and lotions
face masks
gels and ampoules
hair products
body care
sun screens

Application concentration

skin care formulations.....0.2 - 6 %

Incorporation

Elastin PHE should be stirred before using and blended into the water phase at max. 30°C (cold-process capable).

Elastin PHE is compatible with anionic surfactants.

Elastin PHE is soluble in water.

Toxicology

non hazardous in normal use concentration

Storage & Shelf life

Elastin PHE should be stored in a dry and light protected place at 10 - 25°C. Intense sun light and UV-radiation should be avoided. During storage of the product coacervative changes are possible, but do not influence the properties of Elastin PHE. Before usage of the product mix it up.

In closed original containers the shelf life is five years.