Tetrapeptide with anti-oedema properties with a proven efficacy in reducing puffy eyebags.

Appearance
Transparent solution containing 0.1% active ingredient.

INCI
Water (Aqua), Acetyl Tetrapeptide-5.
Please contact us for information on the preservative system.

Properties
Anti-eyebag and anti-dark circle activity, with a draining and decongesting effect.

Applications
eyeseryl® peptide can be incorporated into cosmetic formulations where a reduction of puffiness under the eyes is desired.

Science
As skin loses its elasticity and muscles weaken through age, loose skin can accumulate around the eyes, forming eyebags. Water accumulation is another reason for puffy eyes, also known as eyelid oedema. This accumulation is due to several vascular diseases, such as a poor lymphatic circulation or an increased capillary permeability. eyeseryl® peptide fights against oedema-forming mechanisms and shows a decongesting effect, enhancing elasticity and skin smoothness.

Dosage 1-10%

Solubility
Water soluble.

Significant decrease in only 14 days

Double action: reduction of puffy eyebags and dark circles

Improvement of skin elasticity

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In vitro efficacy

1. GLYCATION INHIBITORY ACTIVITY
Collagen cross-linking, as a result of a glycation reaction, is one of the main causes of the formation of eyebags. The inactivation of SOD (Superoxide Dismutase) by its reaction with fructose is used as a model of glycation.

Inhibition of collagen glycation avoids losing elasticity and subsequent eyebags formation.

2. VASCULAR PERMEABILITY INHIBITION
Test performed in a tissue culture plate using an assay kit, which allows the evaluation of the effects of chemicals on endothelial cell permeability. eyeseryl® peptide is able to inhibit vascular permeability in a dose-dependent manner.

In vivo efficacy

Group of 20 female volunteers, aged 18 to 65.
Application of a cream containing 10% eyeseryl® peptide solution under the eyes twice a day, for 60 days.

1. ANTI-EYEBAG ACTIVITY (DERMATOLOGICAL EVALUATION)

2. SKIN ELASTICITY (QUANTITATIVE EVALUATION)
The elasticity measurements were performed with a cutometer. Elasticity represents the recovery degree of the maximum deformation of the skin reached.

A cream* containing 1% eyeseryl® peptide solution was applied twice a day for 28 days on 17 people, aged 34 to 54. Values were measured after 14 and 28 days.

1. VARIATION IN PUFFINESS
Eyebag volume was measured using a technique called Fringe Projection.

2. ANTI-DARK CIRCLE EFFECT
High resolution photographs of the dark circles were taken under polarised light and chromametry studies were performed. The ITA® (Individual Typological Angle) categorises skin colour.

L* is luminance which represents relative brightness from total darkness (L*=0) to absolute white (L*=100).

* Test performed with a customer’s formulation.