

FACE

EYESERYL®

A TETRAPEPTIDE FOR THE REDUCTION OF PUFFY EYEBAGS

DESCRIPTION

EYESERYL® is a tetrapeptide with anti-oedema properties that shows a proven efficacy in reducing puffy eyebags

INCI

WATER (AQUA),
ACETYL TETRAPEPTIDE-5

PRESENTATION

EYESERYL® SOLUTION containing 0.1% active peptide

USE LEVEL

1 - 10%

FUNCTION



ANTI-EYEBAG



ELASTICITY

 Lipotec

As skin loses its elasticity and muscles weaken through age, loose skin can accumulate around the eyes, forming folds in the eyelids. Fat, which cushions the eyes in their sockets moves forward out of the ocular cavities and accumulates in bulging bags around the eyelids.

The other major reason for puffy eyes is water accumulation, known as eyelid oedema. Fluid may build up for several reasons, two of the major reasons being poor lymphatic circulation and increased capillary permeability.

EYESERYL® is a tetrapeptide with anti-oedema properties with a proven efficacy in reducing puffy eyebags.

Cosmetic benefits

- Fast anti-eyebag action: the draining effect of **EYESERYL®** achieves a reduction of puffy eyebags in only 15 days
- **EYESERYL®** fights oedema-forming mechanisms such as liquid retention
- **EYESERYL®** also enhances skin elasticity, skin smoothness and shows a decongesting effect

Efficacy tests

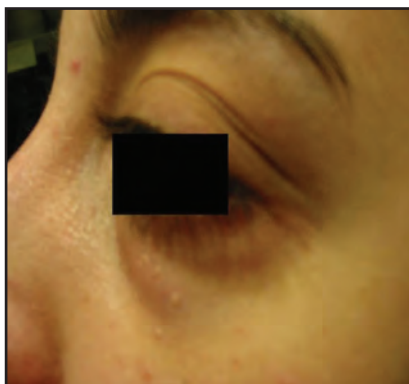
ANTI-PUFFINESS ACTIVITY

IN VIVO TEST ON VOLUNTEERS - QUALITATIVE

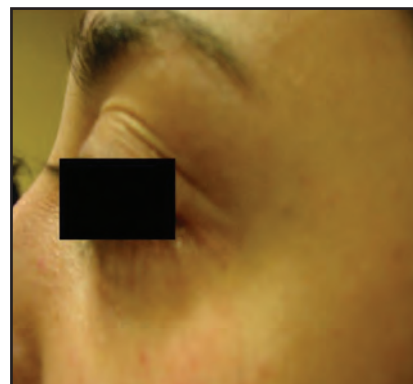
EYESERYL® has been tested in vivo on a group of 20 female volunteers. A cream containing **10% EYESERYL® SOLUTION** was applied twice a day during 60 days. Pictures were taken at 0, 15, 30, 45 and 60 days.

Puffiness under the eyes was greatly reduced, and 70% of the volunteers had improved in only 15 days.

At the end of the test, 95% of the volunteers had improved.



Day 0



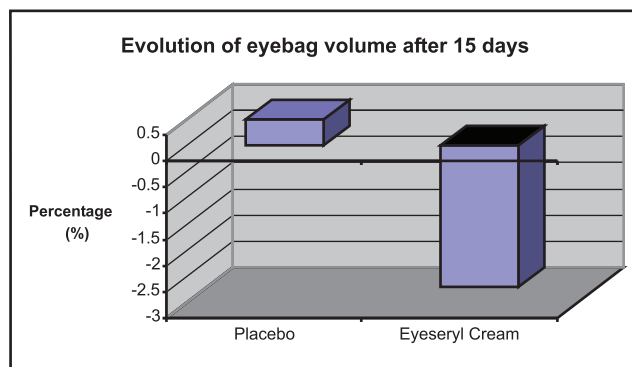
Day 15

IN VIVO TEST ON VOLUNTEERS - QUANTITATIVE

The test was performed on 17 people, aged 34 to 54. A Cream containing **1% EYESERYL® SOLUTION** was applied twice daily during 28 days.

Eyebag volume was measured using a technique called Fringe Projection where 3D images of the study areas are obtained with a FaceScanner and processed with the software Optocat (Breuckman, Germany – EoTech, France). High resolution photographs of the dark circles were taken under polarised light and chromametry studies were performed.

ANTI-PUFFINESS ACTIVITY

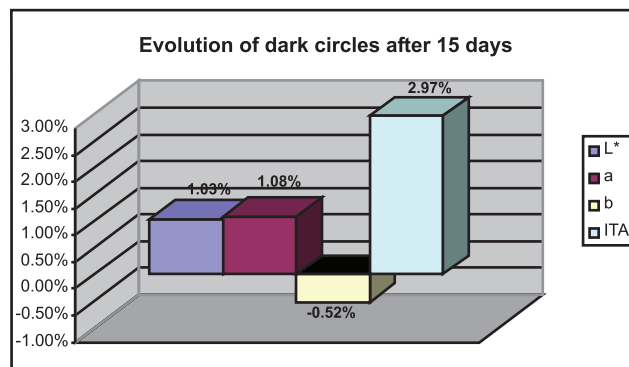


Eyebags were significantly reduced by almost 3% in only 15 days!

After 14 days, 63% volunteers had reduced their eyebags

After 28 days, 70% volunteers had reduced their eyebags

ANTI-DARK CIRCLE ACTIVITY



The ITA° parameter indicates skin colour category as follows:

Brown < 10° < tanned < 28° < normal < 41° < light < 55° < very light

ITA significantly increased (+3%) showing a slight lightening effect

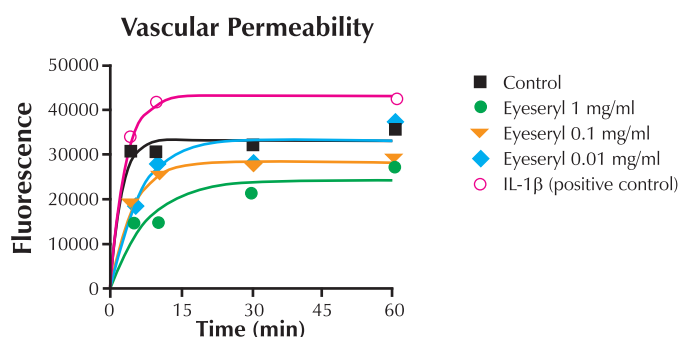
L* is luminance which represents relative brightness from total darkness (L*=0) to absolute white (L*=100)

a* is red/green colour axis and b* is yellow-blue colour axis

VASCULAR PERMEABILITY INHIBITION

One of the main causes of formation of eyebags is water accumulation due to increased capillary permeability. The *in vitro* vascular permeability test provides an efficient system for evaluating the effects of **EYESERYL®** on endothelial cell permeability.

Results show that **EYESERYL®** is able to inhibit vascular permeability in a dose-dependent manner, reaching a 50% inhibition respect to controls with 1mg/mL (0.1%) **EYESERYL®**. This activity *in vitro* would be translated *in vivo* in a decrease of water accumulation in eyebags, since **EYESERYL®** avoids water leakage from blood vessels.



GLYCATION INHIBITION

Collagen cross-linking, which is a reaction produced after glycation and produces damages on the extracellular matrix, is one of the main causes of the formation of eyebags. This test was carried out to evaluate the ability of **EYESERYL®** to inhibit glycation.

The incubation of Superoxide Dismutase (SOD) with sugars gives rise to glycation, which inactivates the enzyme. In this study, the inactivation of SOD by its reaction with fructose is used as a model of glycation. The effect of **EYESERYL®** as an inhibitor of glycation is evaluated.

The results showed that there is an increase in the SOD activity, which means that **EYESERYL®** inhibits its glycation, and therefore prevents the formation of eyebags.

