



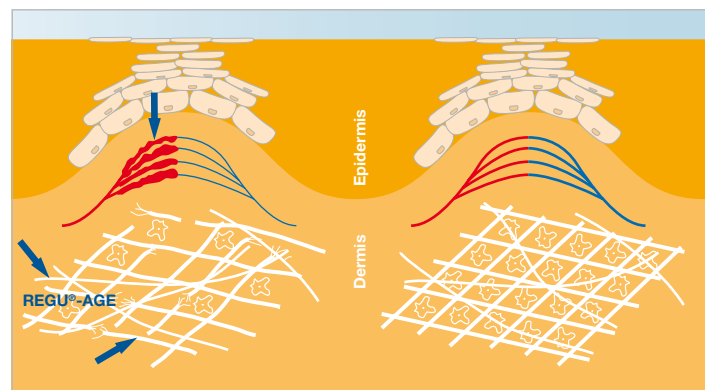
REGU®-AGE

## REDUCES DARK CIRCLES AND PUFFINESS AROUND EYES

The REGU®-AGE active complex consists of specially purified soy and rice peptides, and biotechnologically produced yeast protein. REGU®-AGE exerts a positive, localized effect on the hemodynamic properties of blood to improve oxygen supply to the tissue. *In vitro* tests have shown a significant reduction in the rate of blood clotting. Because the complex inhibits elastase and collagenase, it reduces the harmful effects of chronic UV radiation on the connective tissue to help the skin retain its natural firmness. With the help of oxidoreductase, the amount of free radicals, and thus inflammation processes, are minimized, resulting in a visible reduction of puffiness around the eyes.

### Properties

- Improves blood hemodynamics and microcirculation
- Reduces the proteolytic breakdown of the collagen and elastin matrix
- Reduces the presence of free radicals



Untreated skin

Treated skin



Before treatment



After 8 weeks

### Function

- Reduces dark circles and puffiness around the eyes
- Strengthens the connective tissue
- Reduces inflammation and prevents UV damage

### Cosmetic application

- Facial care products
- Anti-aging eye care creams and gels

### Formulation

REGU®-AGE is a yellowish aqueous solution and can easily be incorporated into the aqueous phase of a formulation. REGU®-AGE should be processed below 40°C and is stable in the pH range of 5.5 to 8.0.

### Suggested concentration

1–5% REGU®-AGE

### INCI name

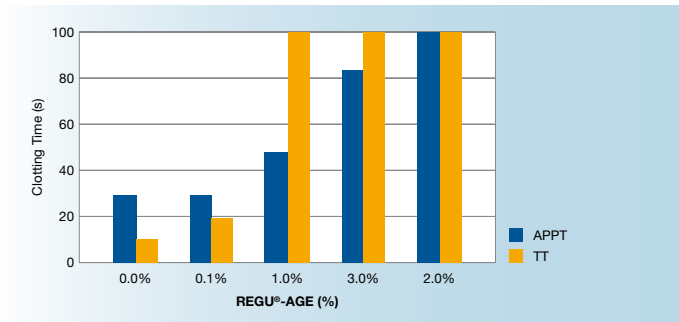
Hydrolyzed Rice Bran Protein, Oxido Reductases, Glycine Soja (Soybean) Protein

## EFFICACY TESTS

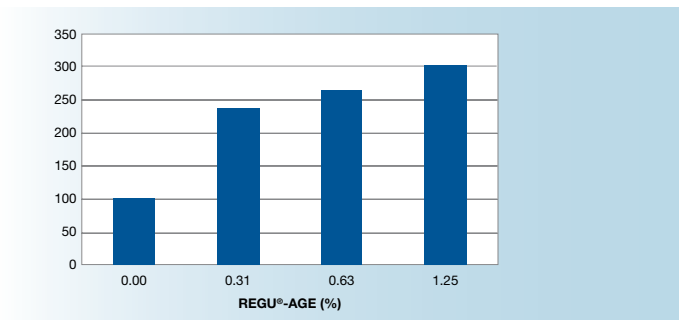
### *In vitro*

#### Beneficial effect on the capillary circulation

*In vitro* tests (aPTT-activated Partial Thromboplastin Time and TT-Thrombin Time) have shown that REGU<sup>®</sup>-AGE improves the microcirculation.



#### Stimulation in fibroblast proliferation

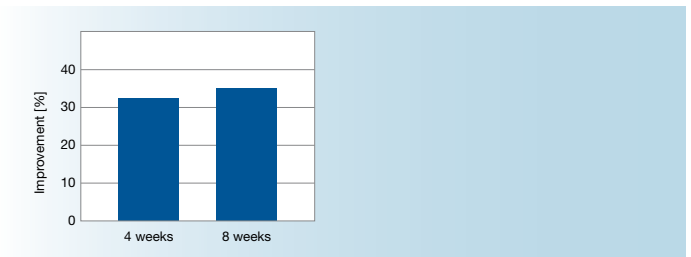


The present *in vitro* assay demonstrated a stimulation in fibroblasts proliferation of about 300% at a concentration of 1.25% REGU<sup>®</sup>-AGE.

### *In vivo*

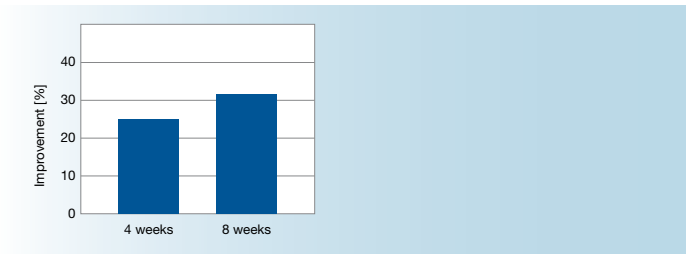
Twenty subjects applied the product to their faces twice a day after facial cleansing over a period of 8 weeks. The study was performed on a double-blind randomized basis.

#### Reduction of dark circles



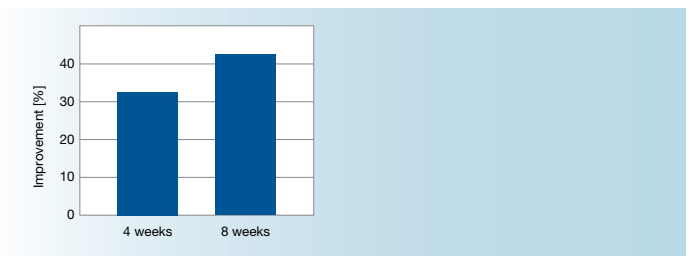
After 8 weeks of treatment with 5% REGU<sup>®</sup>-AGE a reduction of dark circles of around 35% could be observed.

#### Reduction of eye puffiness



After 8 weeks of treatment with 5% REGU<sup>®</sup>-AGE, a reduction of eye puffiness of around 31% could be observed.

#### Skin smoothness



Silicone replicas of the canthus area were taken and analyzed via digital image analysis for lines and wrinkles and overall skin texture. After 8 weeks of treatment with 5% REGU<sup>®</sup>-AGE, an improvement of skin texture of 42% could be observed.