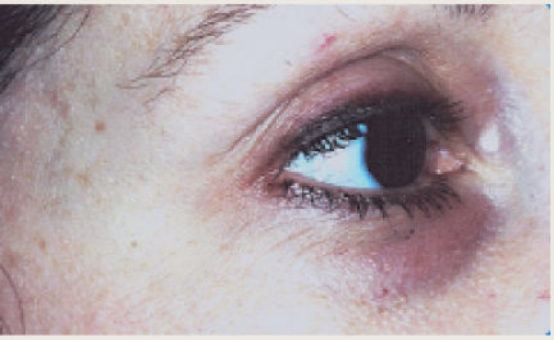
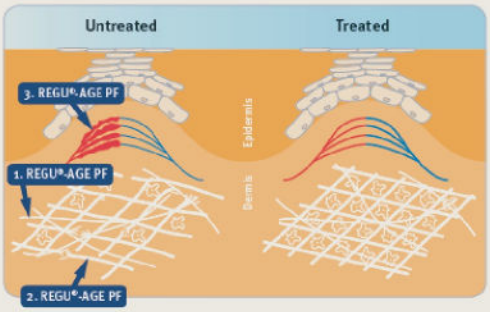
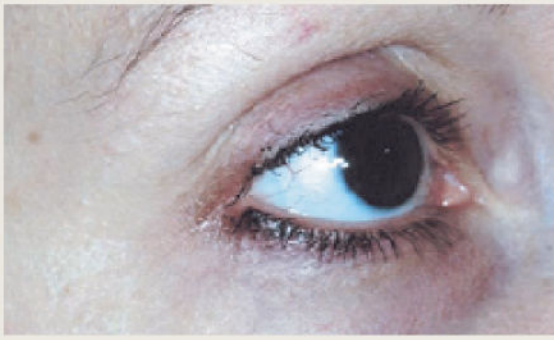
Microcirculation Support

Ingredient Complex: REGU®-AGE



Before treatment





After 8 weeks of treatment

Ingredient Research Highlights

Oxidative stress contributes to under-eye aging and discoloration.
In vitro studies showed that REGU®-AGE PF helps neutralize oxygen free radicals with the support of superoxide dismutase, helping counter oxidative stress that can contribute to visible signs of fatigue around the eyes.

The collagen and elastin matrix plays a critical role in under-eye appearance.
Laboratory testing demonstrated stimulation of fibroblast proliferation and inhibition of collagenase and elastase activity, mechanisms associated with supporting the structural matrix of the skin.

Microcirculation influences dark circles and puffiness.
In vitro hemostasis testing (Thrombin Time and Activated Partial Thromboplastin Time assays) demonstrated that REGU®-AGE PF supports mechanisms associated with capillary circulation in the under-eye area.

Topical cosmetic use can support improvements in under-eye appearance.
In a double-blind study of 20 subjects using a cream containing 5% REGU®-AGE PF twice daily for 8 weeks, trained evaluators observed measurable improvements in dark circles and puffiness.

Skin texture improvements were observed with continued use.
Digital image analysis of silicone replicas of the eye area showed improvements in skin texture after topical application over several weeks.

How This Translates to Our Formula

- Formulated with peptides studied for supporting the delicate collagen and elastin matrix of the eye contour
- Designed to support healthy microcirculation in the infraorbital area
- Helps address visible contributors to under-eye darkness and puffiness
- Supports antioxidant defense in the delicate periocular skin
- Helps improve the appearance of skin texture and smoothness around the eyes
- Developed with ingredients selected to complement dermatological research on eye contour aging

Citation: DSM Nutritional Products. REGU®-AGE PF: Visibly Reduces Dark Circles and Eye Puffiness — Efficacy Substantiation and Clinical Evaluation. Basel, Switzerland: DSM Nutritional Products; 2013.

Hemoglobin & Pigment Accumulation

Ingredient Complex: Haloxyl™

Ingredient Research Highlights

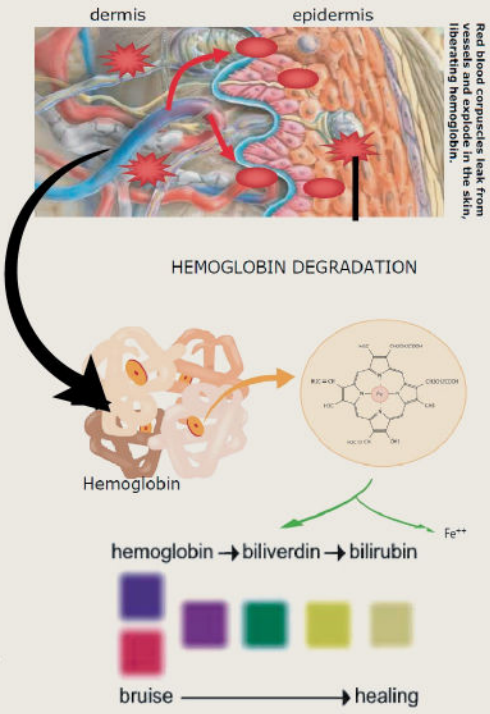
Dark circles are strongly linked to hemoglobin breakdown products.
Research shows that under-eye discoloration can result from the accumulation of hemoglobin and its degradation products in the dermis and epidermis after red blood cells leak from fragile capillaries.

Iron and pigment accumulation contribute to under-eye discoloration.
Laboratory studies demonstrated that specific ingredients can bind iron released during hemoglobin breakdown, helping support its removal from the under-eye area.

Enzymatic pathways are involved in pigment clearance.
In vitro testing showed stimulation of the enzyme UGT1A1, which is associated with bilirubin clearance and may play a role in reducing visible pigment accumulation.

Inflammatory processes may contribute to under-eye discoloration.
Cell culture studies measuring PGE2 release demonstrated anti-inflammatory activity associated with the ingredient complex.

Topical cosmetic use may support visible improvements in dark circles.
In a clinical study of 22 volunteers using a gel containing 2% Haloxyl twice daily for 56 days, instrumental image analysis showed measurable improvements in the appearance of under-eye coloration.



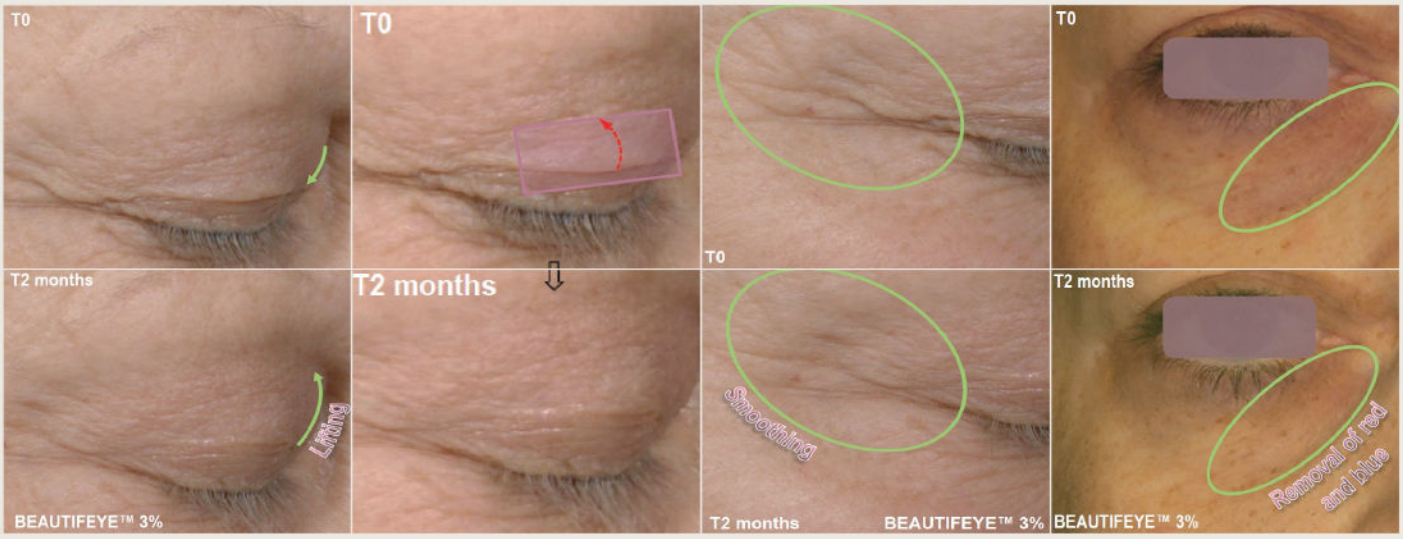
How This Translates to Our Formula

- Formulated with ingredients studied for their role in supporting the appearance of reduced under-eye discoloration
- Designed to address visible contributors to dark circles, including pigment accumulation and vascular breakdown products
- Supports the appearance of brighter, more even-looking under-eye skin
- Helps support healthy microvascular integrity in the delicate eye contour
- Supports a smoother, more refreshed eye area appearance
- Developed with ingredients selected to complement dermatological research on under-eye discoloration and pigmentation pathways

Citation: Sederma. Haloxyl™: Under-Eye Circle Reduction — Efficacy Substantiation and Clinical Evaluation. Le Perray-en-Yvelines, France: Sederma/Croda; 2004.

Dermal Structure & Firmness

Ingredient Complex: BEAUTIFEYE™



Ingredient Research Highlights

Age-related changes in the dermal structure contribute to eyelid sagging.
Research suggests that weakening of the extracellular matrix and dermal contractile capacity may contribute to visible eyelid drooping and loss of firmness.

Collagen and elastin support are associated with improved skin firmness.
In vitro studies demonstrated increased markers associated with collagen and elastin synthesis in fibroblast cultures exposed to the ingredient complex.

Environmental stress and glycation may accelerate visible aging around the eyes.
Laboratory data suggests glycation stress and pollution may contribute to structural degradation and reduced skin elasticity in the periocular region.

Microvascular changes contribute to the appearance of dark circles.
Research indicates that vascular leakage and accumulation of pigments can influence the appearance of discoloration in the under-eye area.

Clinical testing showed visible improvements in eye contour appearance.
In a clinical study using topical application for two months, instrumental analysis showed improvements in eyelid lifting, wrinkle appearance, and dark circle intensity.

How This Translates to Our Formula

- Formulated with ingredients studied for supporting dermal firmness in the eye contour
- Designed to support the appearance of lifted, smoother-looking eyelids
- Supports the structural integrity of the delicate periocular skin
- Helps improve the visible appearance of crow's feet and fine lines
- Supports the appearance of brighter under-eye skin by addressing visible contributors to discoloration
- Developed with ingredients studied for supporting multiple aspects of eye contour aging

Citation: Sederma. BEAUTIFEYE™: Active ingredient targeting eyelid sagging, wrinkles, and dark circles. Technical dossier. Le Perray-en-Yvelines, France: Sederma (Croda International Plc); 2013.

Fluid Retention & Puffiness

Ingredient Complex: EYELISS™

Ingredient Research Highlights

Under-eye bags are associated with multiple physiological factors.
Research indicates that under-eye puffiness is influenced by lymphatic stagnation, capillary permeability, and fluid accumulation in the delicate periocular tissues.

Microvascular leakage contributes to visible puffiness.
Studies demonstrated that increased capillary permeability can allow fluid to accumulate in the under-eye area, contributing to the appearance of eye bags.

Lymphatic drainage plays a role in reducing fluid buildup.
Laboratory testing showed that specific peptide complexes may influence mechanisms associated with lymphatic circulation and fluid drainage in the eye contour.

Targeting vascular permeability may support improvement in puffiness.
Ex vivo testing showed a measurable decrease in capillary permeability associated with hesperidin methyl chalcone, a key component of the complex.

Topical cosmetic application can support visible improvement in eye bags.
In a clinical study of women with chronic under-eye bags, twice-daily application over 56 days was associated with measurable reductions in bag thickness and volume.

How This Translates to Our Formula

- Formulated with peptides associated with supporting healthy lymphatic circulation in the under-eye area
- Designed to support the appearance of reduced puffiness related to fluid accumulation
- Supports healthy microvascular function in the delicate periocular skin
- Helps improve the appearance of under-eye contour smoothness
- Supports a more refreshed, less fatigued appearance around the eyes
- Developed with ingredients studied for their role in supporting visible improvements in under-eye puffiness

Citation: Sederma. EYELISS™: Peptide complex for reduction of under-eye bags and puffiness. Technical dossier and claim substantiation. Le Perray-en-Yvelines, France: Sederma (Croda International Plc); 2014.