

# Product Information

## Multifunctionals:

### **dermosoft**<sup>®</sup> decalact sebum

---

Product features:

- Multitalented antimicrobial active ingredient blend
- For oily and blemish prone skin
- Tackles skin imperfections
- Mild efficacy
- For natural cosmetics

**drstraetmans**

An Evonik brand.

# dermosoft® decalact sebum

---

## The product: dermosoft® decalact sebum

The natural multitasking solution for oily and blemish prone skin with *in-vivo* proven activity. This mild active tackles multiple signs of skin imperfections: Sebum overproduction, enlarged pores, bacterial growth, skin redness and comedones. **dermosoft®** decalact sebum wipes out skin impurities without affecting the skin barrier and helps to re-establish a clear complexion.

### Characteristics

- *INCI: Polyglyceryl-10 Laurate; Sodium Caproyl/Lauroyl Lactylate; Glycerin; Serenoa Serrulata Fruit Extract; Juniperus Communis Fruit Extract*
- Appearance: Clear, amber liquid
- Odor: characteristic
- 100% naturally derived, already COSMOS approved and compliant with other standards for natural cosmetic (please contact us for further information)
- Composition for a multitasking blend:
  - Based on the known selective antimicrobial activity of our **dermosoft®** decalact and the mild cleansing properties of **dermofeel®** G 10 L
  - Combined with potent, naturally derived active ingredients
- All-in-one solution to tackle skin impurities and oily skin
- Very skin friendly
- Provides multiple claiming opportunities (e.g. mild effectiveness, natural cosmetic, sebum regulating, skin refining, anti-redness)
- Ideal for products for oily or blemish prone skin
- Suitable for cosmetic products for longterm usage due to its mildness
- Contains no preservatives
- Low use concentration
- pH range 4.0 - 6.5 for manufacturing
- Optimum efficacy at pH 4.5 - 5.5

### Use concentration

Product Concept	Dosage
All types of cosmetic products	2.0 %

**drstraetmans**

An Evonik brand.

# dermosoft® decalact sebum

---

## How to work with dermosoft® decalact sebum

### Manufacturing procedure (laboratory scale)

#### Surfactant based products

1. Mix **dermosoft**® decalact sebum with the concentrated surfactant base at room temperature.
2. Do not heat above 40°C.
3. Keep the pH between 4.0 and 6.5 during processing. Adjust pH to 4.5 - 5.5 in the finished formulation.

#### O/W-emulsions

1. It is recommended to add **dermosoft**® decalact sebum to the hot oil phase immediately before emulsification and homogenization to avoid high temperature over a longer period of time.
2. Keep the pH between 4.0 and 6.5 during processing. Adjust pH to 4.5 - 5.5 in the finished formulation.

Alternative addition procedure for hot process:

- Add **dermosoft**® decalact sebum after homogenization at a temperature below 40°C and homogenize again.

#### Aqueous based products

- Dilute with the help of a solubilizer.
- In gel formulations: Addition of **dermosoft**® decalact sebum after the formation of the gel network is recommended.

#### Formulation advice

Do not heat above	40°C
Compatibility	Various gelling agents, e.g. Xanthan and Acrylate based gelling agents, Carbomer types
	Ethanol
Solubilization possible with	PEG-free solubilizers, e.g. <b>sybio</b> ®solv clear plus
	PEG-40 Hydrogenated Castor Oil
Clear incorporation into surfactant bases or aqueous products	Addition or increase of solubilizer may be required
pH drift may occur in	Emulsions, aqueous tonics and hydrogels
Avoid pH drift with buffer system	Recommended buffer system at pH ~ 5.0: Tri-Sodium-Citrate

#### Application Ideas

Perfectly suitable for face cleansing, leave on or special care products for oily or combination skin.

For more formulation ideas visit us at:

<https://www.dr-stratmians.de/en/products/>

**drstratmians**

An Evonik brand.

## Proof of Performance

### In-vivo screening study overview

A randomized, single-blinded, vehicle-controlled, split-face in-vivo study including biophysical testing methods (Corneometer®, Sebumeter®, Sebufix®, Visioscan®, VISIA®), standardized photography, expert skin assessment and a participants' questionnaire was conducted.

*Timeline:* Screening appointment → 2-week washout period → test period of 28 days

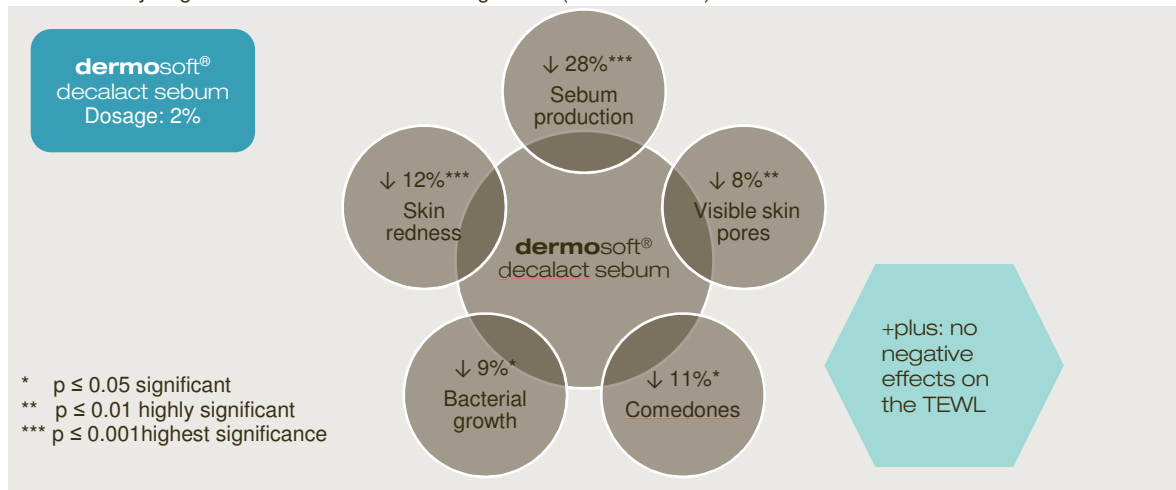
*Participants:* 25 male/female volunteers between the age of 15-36 years

*Test procedure:* Application of standardized amounts of a hydrogel formulation containing 2 % of the active cosmetic blend and a vehicle control hydrogel formulation twice a day over a course of 28 days on one half of the face, respectively.

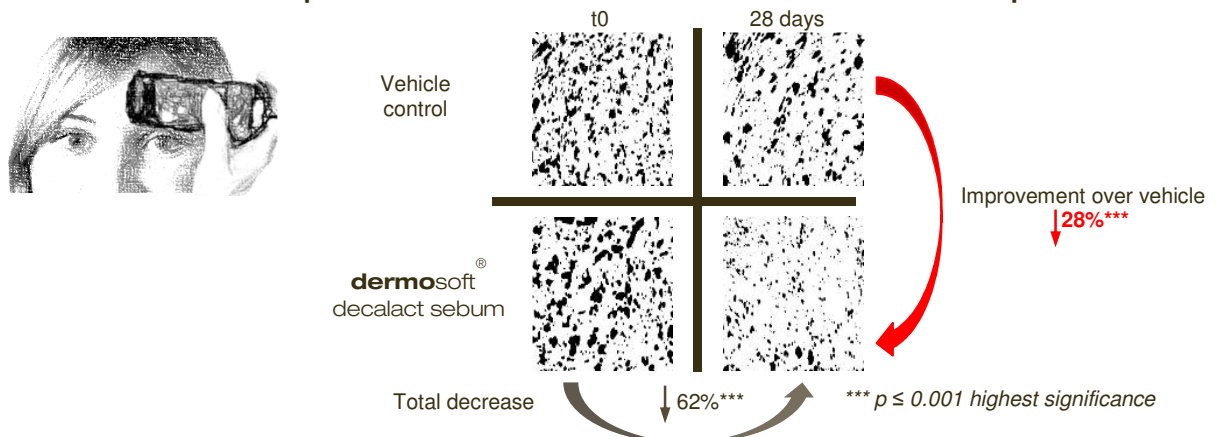
*The study report is available upon request.*

### In-vivo screening study results

These values describe the exclusive effects of dermosoft® decalact sebum – all values calculated minus the positive effect of the hydrogel formulation without active ingredient (vehicle control).



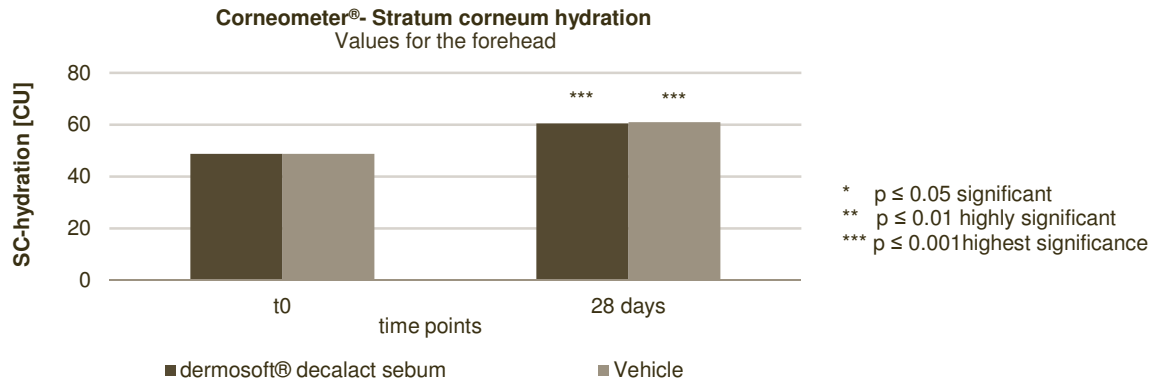
### Reduction of the sebum production - Visioscan®/Sebufix® measurement technique



dermosoft® decalact sebum significantly reduced the sebum production – the skin becomes less greasy and less shiny.

# dermosoft® decalact sebum

**dermosoft® decalact sebum is mild to the skin:  
No negative effects on skin hydration and pH balance**



**dermosoft® decalact sebum** does not negatively affect the TEWL. The skin moisture level increases equally for both the verum and the vehicle formulation.

Likewise, **dermosoft® decalact sebum** had no influence on the natural pH-balance of the skin. There was a slight decrease of the skin pH for both the vehicle control and the verum formulation. This supports the naturally acidic pH of the skin and furthermore counteracts the renewed growth of *Propionibacterium acnes*.

In addition, the participants' self assessment via questionnaire revealed an overall improvement of the skin feel.

## Trade Information

<b>International approval*</b>	EU, USA, Japan, Korea
<b>Packaging</b>	10 kg
<b>Shelf life</b> <i>(stored in original container)</i>	12 months

*\* Information is based on our best knowledge and reviewed for the most requested regions only. We recommend to check current regulatory requirements in individual target countries. For more information contact our regulatory department or refer to our regulatory status statement.*

## Literature

Thiemann, A; Salmina-Petersen, M; Gröne, S; Jänichen, J; Mader, M; Kerscher, M. For blemish-free skin. *Cosma*, 2017, April, 36-40.

For further information contact our Dr. Straetmans sales team:  
sales@dr-straetmans.de  
or your local representative.

# Dr. Straetmans Worldwide Network

---

<https://www.dr-straetmans.de/en/meta/contact/>



**Disclaimer:**

The information above is believed to be accurate and represents the best information currently available to us. Dr. Straetmans makes no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own determination on the suitability of the information for their particular purposes. In no way shall Dr. Straetmans be liable for any claims, losses, damages, lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from the sale or use of this material.

**drstraetmans**

An Evonik brand.

Evonik Dr. Straetmans GmbH · Merkurring 90 · D-22143 Hamburg

Phone: +49 (0)40-669 356-0 · Fax: +49 (0)40-669 356-310 · email: [info@dr-straetmans.de](mailto:info@dr-straetmans.de)