ANTI-SAGGING SKIN REMODELER

Purified polyholosides from linseed

For plumper and redensified skin with "no surgery"
**SCULPTESSENCE™ IS A NATURAL REMODELER DERIVED FROM LINSEED. ITS UNIQUE POLYHOLOSIDES HYDRATE SKIN AND REVERSE SAGGING DISORDERS TO REDESSIGN THE OUTLINE OF THE FACE WITH "NO SURGERY".**

### POLYHOLOSIDES FROM FLAX SEEDS

Linseed (*Linum usitatissimum L.*), a member of the *Linaceae* family, is one of the most ecologically sound agricultural production due to its hardiness and its low requirement for fertilizers. Cultivated worldwide, the seeds have evolved to adapt to dry climatic conditions producing unique polyholosides able to store a large amount of water which is indispensable for hydrating albumen to bring about seed germination. Sculptessence™ was developed from those purified polyholosides containing mainly xylose, and also galactose, arabinose, rhamnose.

### PROVIDING A PLUMPER AND DENSER SKIN

Starting at about 45 years of age, a skin dehydration and a decrease in dermal constituents are observed leading to a loss of skin substance and density. The skin becomes thinner and less toned, the cheeks lose volume and a sagginess of the skin appears along the jaw line.

The space between skin cells is filled with tangled macromolecules, mostly consisting of collagen, elastin, glycosaminoglycans (GAGs) and proteoglycans which form the extracellular matrix playing an essential role in the skin firmness and tonicity. The collagen forms structures which resist tensile forces while the GAGs resist compressive forces. This is an ideal combination which gives skin strength, flexibility, elasticity and suppleness. However, this matrix deteriorates with age, inducing a loss of firmness and a diminution of the mechanical properties of the skin.

Sculptessence™ compensates for these aging disorders in three ways of actions: skin hydration, stimulation of GAGs synthesis and protection of collagen.

### Skin water reservoir

Polyholosides are long chains of ose units forming a mesh which traps water molecules because of their polarity. Due to their high Water Absorption Index (WAI>30), the polyholosides of Sculptessence™ are able to absorb at least 30 times their weight in water, thus serving as a “water reservoir” for the epidermis.

A corneometry study shows that at 5% Sculptessence™ moisturizes skin all day long.

---

**Indicative composition of polyholosides of Sculptessence™**

<table>
<thead>
<tr>
<th>Ose</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylose</td>
<td>≃ 25 - 30%</td>
</tr>
<tr>
<td>Galactose</td>
<td>≃ 6 - 8%</td>
</tr>
<tr>
<td>Arabinose</td>
<td>≃ 4 - 9%</td>
</tr>
<tr>
<td>Rhamnose</td>
<td>≃ 4 - 7%</td>
</tr>
<tr>
<td>Fucose</td>
<td>≃ 1 - 3%</td>
</tr>
<tr>
<td>Glucose</td>
<td>≃ 1 - 3%</td>
</tr>
<tr>
<td>Ribose</td>
<td>&lt; 0.1%</td>
</tr>
<tr>
<td>Mannose</td>
<td>&lt; 0.1%</td>
</tr>
</tbody>
</table>

**Structure of xylose**

$\text{HO}_2\text{C} = \text{O} \quad \text{HO}_2\text{C} = \text{O} \quad \text{HO}_2\text{C} \quad \text{OH}$

**Hydration variation**

<table>
<thead>
<tr>
<th>Time (hours)</th>
<th>% compared to placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 h</td>
<td>17.5</td>
</tr>
<tr>
<td>4 h</td>
<td>15.5</td>
</tr>
<tr>
<td>6 h</td>
<td>12.3</td>
</tr>
<tr>
<td>8 h</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Carried out on 9 volunteers
Tested cream reference 10.215.02 C69: Sculptessence™ (5%), Aristoflex™ AVC (0.76%), Phenonip™ (0.48%), water (93.76%).
Placebo reference 10.215.01 C69: Aristoflex™ AVC (0.8%), Phenonip™ (0.5%), water (98.7%).
Stimulation of the GAGs synthesis

Glycosaminoglycans are fundamental components of the dermis. They are long unbranched chains of high molecular weight consisting of repeating saccharide units. The GAGs synthesis is initiated by the sequential addition of four monosaccharides: xylose-galactose-galactose-glucuronic acid. Xylose, the main pentose of Sculptessence™, is the first essential constituent of GAGs and consequently regulates their synthesis.

The action of Sculptessence™ on GAGs was evaluated on skin explants by applying a cream containing 5% Sculptessence™ for 11 days. Cross sections of skin explants and a Mowry staining of GAGs were carried out after 6 and 11 days of treatment.

On the skin explants treated with Sculptessence™, the increase in the stained surface correlates with an over-expression of GAGs, particularly along the dermo-epidermal junction.

The quantification of GAGs in the dermo-epidermal junction shows a significant increase in their synthesis with Sculptessence™, due to the bring of polyholosides, and particularly xylose.

Highly hydrophilic, GAGs also maintain the hydration of dermal tissues. They form a gelly network which brings consistency to the skin. Sculptessence™ provides a “hyaluronic acid-like” effect which plumps the skin.

SCULPTESSENCE™ REPLENISHES THE SKIN VOLUME WITH "NO INJECTIONS".
Protection of collagen

Collagen is the major structural protein forming an armature which supports the skin structure. Over time, collagen is subject to a degradation mainly caused by enzymes like MMPs (matrix metallo-proteases). GAGs and proteoglycans are combined with collagen fibers and form a 3-dimensional matrix which protects the collagen from degradation and maintains skin firmness.

The action of Sculptessence™ on collagen protection was evaluated on skin explants by applying a cream containing 5% Sculptessence™ for 11 days. Cross sections of skin explants and a Sirius red staining of collagen were carried out at D0 and after 6 and 11 days of treatment.

Ex vivo tests using skin explants reproduce accelerated aging conditions. At D0, there is a large stained surface which means that the dermis is dense. At D6 and D11, a progressive decrease in the stained surface is observed, correlated with skin explants aging and collagen degradation. However, the skin explants treated with Sculptessence™ present a less important degradation.

For the untreated explants, the collagen is degraded throughout the test. In contrast, with Sculptessence™, the degradation process is slowed down from 6 days. Sculptessence™ protects the collagen from degradation. As a result, the skin keeps its firmness.

SCULPTESSENCE™ STIMULATES THE GAGS SYNTHESIS AND PROTECTS COLLAGEN FROM DEGRADATION.
Clinical study

A cream containing 5% Sculptessence™ was tested versus a placebo using the in vivo fringe projection method. This technique measures the volume variations of a selected area after a treatment, by image acquisition of the morphology in three dimensions. 24 female volunteers (45-61 years old) with saggy skin applied the active cream and the placebo twice a day to opposite sides of the face and neck over 42 days. Images were taken at D0 and D42 and the volumes of the jaw line were analyzed and compared.

After 6 weeks of use, Sculptessence™ causes a significant decrease in volume along the jaw line (-9.2%).

The superposition of 3-D images of the face of a volunteer before and after the treatment shows the Sculptessence™ effect on sagging skin.

Rehydrated, denser and firmer, skin is more taut. The decrease in jaw line volume is clearly visible. Facial contours are redefined and lifted from within to regain their original curves.

Self-assessment

After 42 days of a twice daily application of the cream containing 5% Sculptessence™ versus a placebo, volunteers agree with the following statements:

- The skin is visibly smoother: 92%
- The skin is firmer: 75%
- The skin is plumper: 67%
- The skin is more moisturized: 83%

SCULPTESSENCE™ REDESIGNS THE OUTLINE OF THE FACE WITH A NATURAL RESULT.
**PRODUCT DESCRIPTION**

**INCIDENT NAMES**
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract
- Sodium phytate (and) Water
- Lysolecithin (and) Sclerotium gum (and) Xanthan gum (and) Pullulan
- Prunus amygdalus dulcis (sweet almond) oil
- Butyrospermum parkii (shea) butter
- Tocopherol (and) Helianthus annuus (sunflower) seed oil
- Fragrance
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract
- Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract

**ECOCERT / COSMOS STATUS**
- Registered - Organic version: Sculptessence™ Bio
  (INCI: Betula alba juice (and) Glycerin (and) Linum usitatissimum (linseed) seed extract)
- Status: Registered - Organic version: Sculptessence™ Bio

**APPEARANCE**
- White to light beige translucent gel

**FORMULATION**
- Add into water phase or at the end of the process (cold or hot process)

**OPTIMUM pH**
- 2-12

**DOSAGE**
- 3-5%

**APPLICATIONS**
- Anti-aging face care
- Reshaping and firming body care
- Lip balm

**CHINA-COMPLIANT**

---

**FEATURES AND BENEFITS**

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>High water absorption index</td>
<td>Immediate and long-lasting skin moisturization</td>
</tr>
<tr>
<td>Increase in GAGs synthesis</td>
<td>“Hyaluronic acid-like” effect for a plumping action</td>
</tr>
<tr>
<td>Clinically proven</td>
<td>Limits collagen degradation for a firmer skin</td>
</tr>
<tr>
<td></td>
<td>Redesigns the face contour without surgery</td>
</tr>
</tbody>
</table>

---

**ULTRA SOFT GEL-CREAM 11.059.03 C105**

**INGREDIENTS**

<table>
<thead>
<tr>
<th>A</th>
<th>Deonised water Dermofeel™ PA-3* Ecogel™</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sodium phytate (and) Water</td>
</tr>
<tr>
<td></td>
<td>Lysolecithin (and) Sclerotium gum (and)</td>
</tr>
<tr>
<td></td>
<td>Xanthan gum (and) Pullulan</td>
</tr>
<tr>
<td>B</td>
<td>Prunus amygdalus dulcis (sweet almond)</td>
</tr>
<tr>
<td></td>
<td>oil</td>
</tr>
<tr>
<td></td>
<td>Butyrospermum parkii (shea) butter</td>
</tr>
<tr>
<td></td>
<td>Isoamyl laurate</td>
</tr>
<tr>
<td></td>
<td>Tocopherol (and) Helianthus annuus (sunflower) seed oil</td>
</tr>
<tr>
<td>C</td>
<td>Dermorganics 1388*</td>
</tr>
<tr>
<td>D</td>
<td>Sculptessence™ Nature Coton</td>
</tr>
<tr>
<td></td>
<td>Water (and) Glycerin (and) Linum usitatissimum (linseed) seed extract</td>
</tr>
<tr>
<td></td>
<td>Water (and) Helianthus annuus (sunflower) seed oil (and) Lecithin (and) Polyglyceryl-3 diisostearate (and) Glycerin (and) Glyceryl stearate (and) Gossypium herbaceum (cotton) extract</td>
</tr>
<tr>
<td></td>
<td>Water (and) Sambucus nigra flower extract</td>
</tr>
<tr>
<td>E</td>
<td>Douceur 3246</td>
</tr>
</tbody>
</table>

**%**

| A | 76.50 | 0.10 | 2.00 |
| B | 3.00  | 4.00 | 2.00 | 0.20 |
| C | 4.00  |     |     |
| D | 5.00  | 2.00 |     |
| E | 0.20  |     |     |

**pH:** 5.0 - 5.5  -  **Viscosity (Rheo ELV 8, spindle 4, 60 rpm, 30 s):** 18 000 - 24 000 mPa.s

---

* Distributed in France by Lucas Meyer Cosmetics.

This brochure is not intended for consumers and neither this brochure nor any extract thereof shall be used in order to commercialize products to consumers. No drawing, photograph or other extract derived from this brochure shall be used by any person without our prior written approval. As well, no claim with respect to the ingredient referred to in this brochure shall be made by any person without our prior written approval, even though the claim is set forth in this brochure. The person using the ingredient referred to in this brochure in the formulation of finished products is solely responsible for ensuring that the use made of the ingredient, the finished products marketed to consumers, their packaging, labeling and advertising materials and the claims made with respect to the finished products and the ingredient comply with all applicable laws and regulations. We hereby disclaim any warranty of suitability of the ingredient referred to in this brochure for any purpose. Any prospective user of the ingredient shall himself determine the suitability of the ingredient for his intended use and, as the case may be, obtain the required regulatory approvals for the commercialization of his finished products.

---

**LUCAS MEYER COSMETICS S.A.S.**
ZA les Belles Fontaines
99 route de Versailles
91160 Champlan - France
T: +33 (0)1 69 10 69 69 - F: +33 (0)1 69 10 69 70

**LUCAS MEYER COSMETICS CANADA INC.**
Place de la Cité, Tour de la Cité
2600 boul. Laurier, #900
Québec (Québec) - G1V 4W2 Canada
T: +1 418 653-6888 - F: +1 418 653-6005

www.lucasmeyercosmetics.com
info@lucasmeyercosmetics.com

---

JOIN THE SPIRIT

March 2013

* Distributed in France by Lucas Meyer Cosmetics.