ALGISIUM C

SKIN RESTRUCTURATION
BODY FIRMING
LIPOLYSIS
SOOTHING
ANTI-STRETCH MARKS
FACE AND BODY MOISTURIZER
ANTI-OEDEMA
ALGISIUM C® is a SILANOL, a cosmetic active range of patented active ingredients relying on the silicium technology. EXSYMOL’s research managed to stabilize and improve the cutaneous bioavailability of organic silicium synthesizing monomethylsilanetriol.

ALGISIUM C® is a multi-functional active ingredient. Its broad efficacy and cosmetic interest, substantiated by EXSYMOL’s constant research and confirmed by the feedbacks of worldwide customers, make of this active ingredient a reliable partner for various cosmetic applications. Moreover, the “silanol technology” appears as a basement for firming and anti-aging body restructuration. Besides its benefits as an active ingredient, ALGISIUM C® and more broadly the SILANOLS have a long lasting skin restructuring activity that can optimize the noticeable benefits of other active ingredients.

ORGANIC SILICIUM and cutaneous tissue
Skin’s natural silicium is a structural component of the connective tissue. It can be compared to dermal cement that ensures optimal links between the elements of the extra cellular matrix such as glycoaminoglycans and proteoglycans.

ORGANIC SILICIUM and skin aging
With aging, skin organic silicium content naturally decreases. Less elastic and structured, the cutaneous tissue is slowly collapsing, first fine wrinkles appear.

The SILANOL cure
Targeting skin rejuvenation, it is essential to compensate the observed natural loss of organic silicium. ALGISIUM C® is among the most effective source of available silicium. It can be directly assimilated by the skin and persistant towards the slow and inevitable collapse of the skin.
**COSMETIC TARGETS**

**ALGISIUM C®** represents a bio available source of organic silicium, rich in hydroxyle functions. **ALGISIUM C®** activity at the connective tissue level is its main advantage and opportunity for slowing down skin’s premature aging.

**SKIN BENEFITS**

**Cutaneous connective tissue restructuration**
- Optimized dermo-epidermic cooperation  
  - SCIENTIFIC PUBLICATION, 0643
- Optimized cutaneous regeneration  
  - SCIENTIFIC PUBLICATION, 0141
- Protection against free radicals  
  - SCIENTIFIC PUBLICATION, 0141
- Protection against the glycation of the cutaneous structural proteins (collagen, elastin)  
  - SCIENTIFIC PUBLICATION, 0141
- Skin inflammation control  
  - SCIENTIFIC PUBLICATION, 0143
- Normalization of the lipolytic activity  
  - SCIENTIFIC PUBLICATION, 0142

**COSMETIC APPLICATIONS**

**SKIN REPAIR** – Prevention and restructuration
**SKIN FIRMING AND ELASTICITY** – Collagen production stimulation
**LIPOLYSIS** – Body slimming and helps reduce dark circles
**SOOTHING** – Anti free radicals and inflammatory response control
**ANTI STRETCH MARKS** – Deep hydration and optimized collagen quality
**FACE AND BODY HYDRATION** – Intense and long lasting
DERMO-EPIDERMIC COOPERATION

SCIENTIFIC PUBLICATION_0643

Evaluation of silicium potential on intercellular communication

After incubation with different concentrations of ALGISIUM C®, keratinocytes have demonstrated fibroblastic growth induction (proliferation and differentiation).

=> ALGISIUM C® by normalizing keratinocytes metabolism induces up to 100% fibroblastic stimulation by normalizing keratinocytes metabolism.

CUTANEOUS REGENERATION

SCIENTIFIC PUBLICATION_0141

Evaluation of silicium potential on fibroblastic cytostimulation

After incubation with different concentrations of ALGISIUM C®, “aged” fibroblasts (FCS 2%) have demonstrated proliferative activity.

Evaluation of silicium potential on collagen production

ALGISIUM C induces a boosted collagen production over “aged” fibroblasts (FCS 2%).

=> ALGISIUM C® induces cellular regeneration and optimizes the synthesis of structural element such as collagen.

LIPOLYTIC ACTIVITY

SCIENTIFIC PUBLICATION_0142

Evaluation of silicium potential on glycerol production (reaction product of lipolysis)

=> ALGISIUM C® induces the release of excess fatty acid contained in adipocytes.

=> ALGISIUM C® induces a down regulation of pre-adipocytes maturation.
After incubation with different concentrations of ALGISIUM C®, an increase of cell’s membrane order is observed, that optimizes cells protection against free radicals.

=> ALGISIUM C® improves cell’s protection against damage induced by toxic species by increasing membranes resistance.

Evaluation of silicium potential on cell’s membrane reinforcement

Silicium’s strong affinity with dermis structural protein fibers (collagen, elastin…) limits the available sites of cross-linking.

=> ALGISIUM C® preserves structural proteins elasticity and delays the first visible signs of skin premature aging (wrinkles, uneven skin tone…).

Evaluation of silicium’s potential against the generation of cross-linked collagen

Evaluation of silicium potential on limiting iL-1α

After incubation with different concentrations of silicium, UV exposed keratinocytes express less iL-1α, describing less severe inflammatory response.

=> ALGISIUM C® soothing action protects skin against severe and damageable inflammatory response.
ALGISIUM C®

ANTI-AGING HYDRATION

Long lasting cutaneous moisturization assessed by corneometry

Algisium C®, dermal restructuration activity, enables the creation of deep cutaneous hydration spheres for long lasting benefits.

Anti-aging benefits of an optimized cutaneous hydration assessed by corneometry

High performance and long lasting hydration reinforce skin resistance against the signs of premature aging.

ANTI-WRINKLES

Clinical evaluation of Algisium C®’s potential for wrinkles care

Algisium C® most impressive plumping activity provides deep and intermediate wrinkle minimization. Algisium C® protection of the structural tissue of the skin (extracellular matrix and its components: elastin, collagen..) illustrates its prevention activity against cutaneous collapse.

ANTI-AGING AND ANTI-STRETCH MARKS

Clinical evaluation of skin premature aging criteria after treatment

Algisium C® improves all major anti-aging targets, among which less classical criteria such as skin tone radiance. These overall improvements help global body care and can even be very effective to prevent from the formation of stretch marks.

FIRMING, SLIMMING AND LIPOLYTIC ACTIVITY

Clinical evaluation of Algisium C®’s potential for slimming care

Algisium C® induces a centimetric loss (especially on the waist) and a spectacular improvement on cellulite appearance due to dermis restructuration (firm and elastic).
**ALGISIUM C®**

**ANALYTICAL COMPOSITION**

- Monomethylsilanetriol: 0.3%
- Including SILICIUM: 0.09%
- Mannuronic acid: 0.6%
- Preservative(s): sq%
- Water: sqf 100%

**TECHNICAL CHARACTERISTICS**

- Limpid, colorless liquid
- PH: approx 5
- Density at 20°C: approx 1.0
- Soluble in water, alcohol and glycols

**PRESERVATIVE ALTERNATIVES**

Different preservative systems are available in order to fit with your requirements. Among these versions, we try to develop as often as possible preservative free ingredients. Please contact us for details about the available versions.

**TOLERANCE STUDY**

**ALGISIUM C®** does not show any toxicity. Tolerance studies were undertaken on *in vitro* alternative methods (cell culture and reconstructed epidermis) and on volunteers. Details on the tolerance studies can be found on the product’s MSDS.

**FORMULATION**

- Use level: 4 to 6%
- Incompatibilities: concentrated calcium salts, alcohols and concentrated glycols

**AVAILABILITY**

- 5, 30, 60 kg and 1 ton.