SKIN RESTRUCTURATION
BODY FIRMING
LIPOLYSIS
SOOTHING
ANTI-STRETCH MARKS
FACE AND BODY MOISTURIZER
ANTI-OEDEMA

EXSYMOL MONACO

**ALGISIUM C** $^{\otimes}$  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.

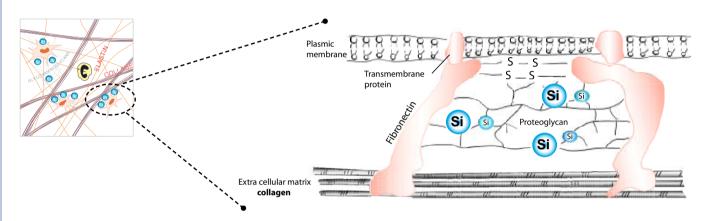
**ALGISIUM C** $^{\otimes}$  is a multi-functional active ingredient. Its broad efficacy and cosmetic interest, substantiated by EXSYMOL's constant research and confirmed by the

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  $\mathbf{C}^{\otimes}$  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

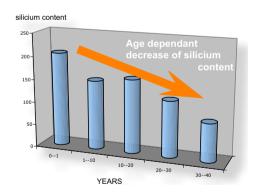
Skin's natural silicium is a structural component of the connective tissue. It can be compared to dermal cement that ensures optimal links between the elements of the extra cellular matrix such as glycoaminoglycans and proteoglycans.

Organic silicium restructuring activity helps maintaining skin's mechanical's properties such as elasticity, firmness but also preserves cell's optimal metabolic efficiency.



### **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.



### INCI NAME: METHYLSILANOL MANNURONATE

ALGISIUM  $C^{\otimes}$  represents a bio available source of organic silicium, rich in hydroxyle functions. ALGISIUM  $C^{\otimes}$  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 PURITCATION 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

### PREVENTION against skin's premature aging

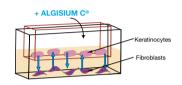
### **DERMO-EPIDERMIC COOPERATION**

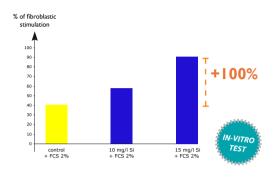
SCIENTIFIC PUBLICATION 0643

#### Evaluation of silicium potential on intercellular communication

After incubation with different concentrations of **ALGISIUM C**<sup>®</sup>, 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

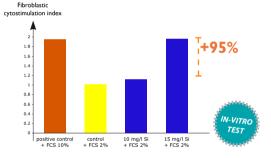
### Evaluation of silicium potential on fibroblastic cytostimulation

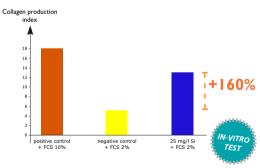
After incubation with different concentrations of **ALGISIUM C**<sup>®</sup>, "aged" fibroblasts (FCS 2%) have demonstrated proliferative activity.

#### Evaluation of silicium potential on collagen production

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

=>ALGISIUM  $C^{\otimes}$  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<sup>®</sup> induces the release of excess fatty acid contained in adipocytes.

=>ALGISIUM  $C^{\otimes}$  induces a down regulation of pre-adipocytes maturation.







lycerol production index

T+200%



PRE-ADIPOCYTE

EXSYMOL S.A.M. - 4 avenue Albert II - MC 98000 MONACO

### PROTECTION against skin's premature aging

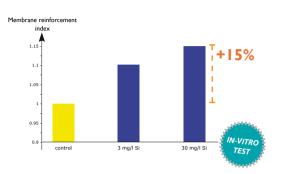
### FREE RADICALS PROTECTION

SCIENTIFIC PUBLICATION 0141

### Evaluation of silicium potential on cell's membrane reinforcement

After incubation with different concentrations of ALGISIUM  $C^{\otimes}$ , an increase of cell's membrane order is observed, that optimizes cells protection against free radicals.

=>ALGISIUM C<sup>®</sup> improves cell's protection against damage induced by toxic species by increasing membranes resistance.



### **ANTI-GLYCATION**

SCIENTIFIC PUBLICATION 0141

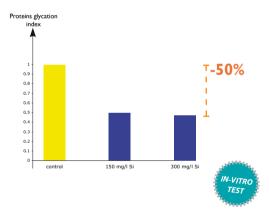
### Evaluation of silicium's potential against the generation of cross-linked collagen





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...).



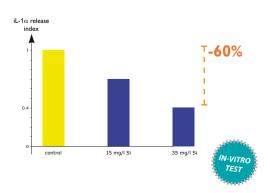
#### ANTI-INFLAMMATORY

SCIENTIFIC PUBLICATION\_0143

### Evaluation of silicium potential on limitating iL-1 $\alpha$

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

=>ALGISIUM  $\ensuremath{\text{C}}^{\ensuremath{\text{\otimes}}}$  soothing action protects skin against severe and damageable inflammatory response.

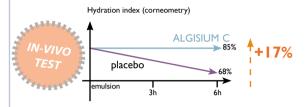


#### **ANTI-AGING HYDRATION**

SCIENTIFIC PUBLICATION \_0140

Long lasting cutaneous moisturization assessed by corneometry

**ALGISIUM**  $\mathbb{C}^{\mathbb{B}}$ , dermal restructuring activity, enables the creation of deep cutaneous hydration spheres for long lasting benefits.



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



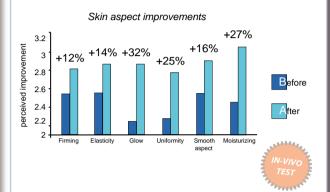
High performance and long lasting hydration reinforces skin resistance against the signs of premature aging.

Elasticity
Roughness
Desquamation
+20%
-30%
+25%

### ANTI-AGING AND ANTI-STRETCH MARKS

SCIENTIFIC PUBLICATION\_I 144

Clinical evaluation of skin premature aging criteria after treatment



**ALGISIUM C**<sup>®</sup> 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.

### **ANTI-WRINKLES**

SCIENTIFIC PUBLICATION\_0738

Clinical evaluation of ALGISIUM C<sup>®</sup>'s potential for wrinkles care





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

#### Wrinkles minimization



### FIRMING, SLIMMING AND LIPOLYTIC ACTIVITY

SCIENTIFIC PUBLICATION\_0142

Clinical evaluation of ALGISIUM C<sup>®</sup>'s potential for slimming care

**ALGISIUM**  $C^{\circledcirc}$  induces a centimetric loss (especially on the waist) and a spectacular improvement on cellulite appearance due to dermis restructuration (firm and elastic).



# **ANALYTICAL COMPOSITION**

Monomethylsilanetriol0.3%Including SILICIUM0.09%Mannuronic acid0.6%Preservative(s)sq%Watersqf 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.

