



■ SOOTHES irritations

caused by shaving, clothing, sand, salt etc.



■ CALMS redness

caused by UVA and UVB



■ RELIEVES stinging

caused by AHAs, deodorants, depilatory creams and lightening treatments



■ PROVIDES COMFORT for reactive skin

suffering irritation related to reduced skin thickness, age, genetics and environmental conditions

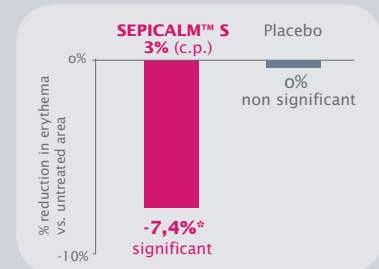
■ All around protection against stress, a genuine feeling of well-being and skin comfort

Mechanical stress

SEPICALM™ S limits abrasion-induced erythema
Measured before and 30 min after application of the formulas on 5 volunteers (forearm)
- Colorimeter (parameter *a**).

SEPICALM™ S formulated in a cream gel with Sepigel™ 305 (2%) base

**p* < 0.05

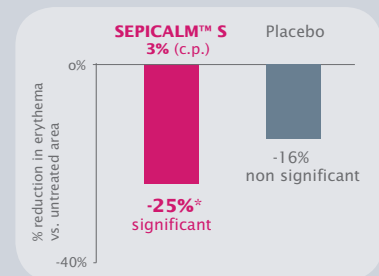


Solar stress

SEPICALM™ S reduces induced actinic erythema
Measured after application of the formulas following irradiation (1 DEM) on 5 volunteers (back)
- Colorimeter (parameter *a**).

SEPICALM™ S formulated in a cream gel with Sepigel™ 305 (2%) base

**p* < 0.05

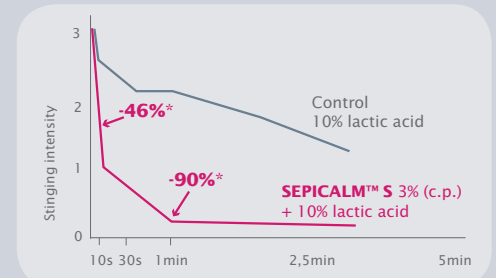


Chemical stress

SEPICALM™ S reduces the intensity of stinging
10 volunteers felt immediate relief after application (nasogenian furrows). Irritation induced by lactic acid.

SEPICALM™ S formulated in an emulsion with Montanov™ 68 (7%) and Sepigel™ 305 (2%) base

**p* < 0.05

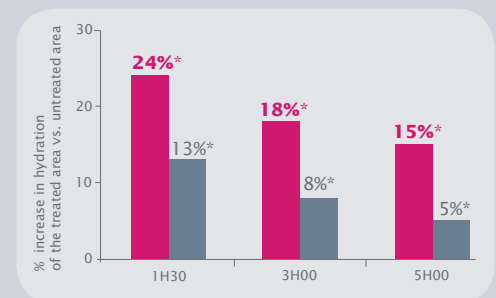
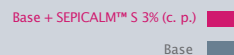


Sensitive skin

SEPICALM™ S encourages hydration immediately and for up to 5 hours on 10 volunteers (forearm)
- Corneometry

SEPICALM™ S formulated in an emulsion with Montanov™ 68 (7%) and Sepigel™ 305 (1%) base

**p* < 0.05



■ Identification

Lipoaminoacid: mineral enriched vectorized essential amino acids

INCI name: Sodium Cocoyl Amino Acids & Sarcosine & Potassium Aspartate & Magnesium Aspartate

Amphiphilic structure: excellent cutaneous bioaffinity

Water-dispersible

Easy to use: for all types of products (slightly colored, odorless)

Dose: 3%

Preservative free grade: SEPICALM™ S WP

MODE OF ACTION

1 Expression of genes causing inflammation is limited

SEPICALM™ S calms inflammation by targeting the core of the cells.

- Inhibits primary inflammatory response:
Limits the expression of the 2 subunits Fos (-21%) and Jun-B (-26%), components of the AP-1 key transcription factor which causes expression of inflammation genes.

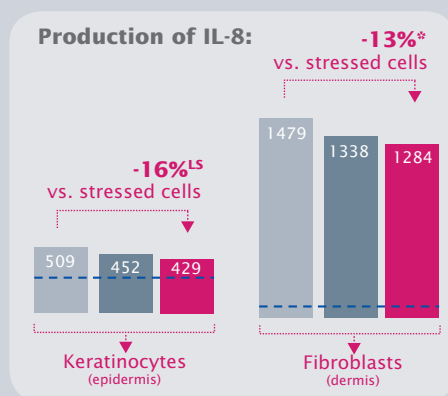
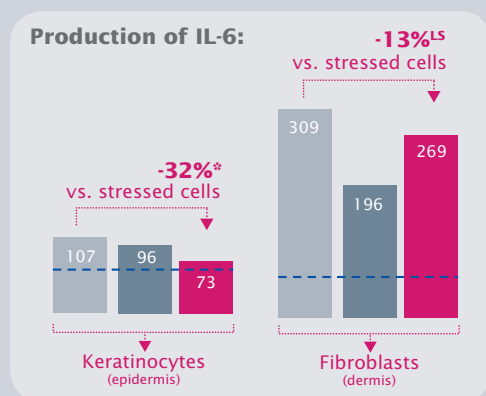
Less AP-1 for HAPPY skin!

- Reduces the expression of pro-inflammatory substances:
 - cytokines (IL-6: -60%; TNF- α : -21%; CCL-2: -21%)
 - enzymes of the arachidonic acid metabolism (ALOX: -48%)
 - degradation enzymes of the extracellular matrix (MMP-3: -25%)
- Prevents amplification of the NF- κ B-induced inflammatory response, transcription factor activated secondly by CCL-2 and ALOX.

Protocol: Study of the expression of normal human keratinocytes genes, pre-treated with SEPICALM™ S or untreated. Transcriptomic analysis 24 hrs after UV irradiation. % expressed compared to the control subjected to UVA + UVB, untreated.

2 Production of inflammation mediators reduced

SEPICALM™ S reduces IL-6 and IL-8 secretion in stressed epidermis and dermis.

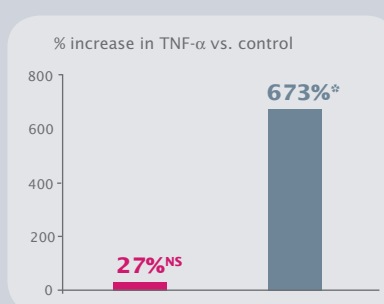
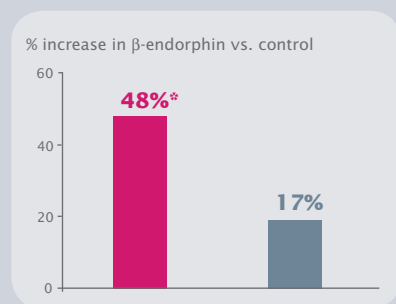


Protocol: Incubation of normal human keratinocytes and fibroblasts with an inflammatory response inducer (TNF α : 10 ppm) with or without SEPICALM™ S or positive reference Dexamethasone. Dosage of IL-6 and IL-8 by specific immunoenzymatic assay (ELISA), respectively after 24 and 48 hrs incubation. Results expressed in ng/mg proteins.

■ stressed cells
■ stressed cells + Dexamethasone (0.39 ppm)
■ stressed cells + SEPICALM™ S (5 ppm)
--- Level of production for non-stressed cells
LS: 0.05 < p < 0.1 *p < 0.05

3 Sensation of cutaneous biological well-being is stimulated

SEPICALM™ S significantly increases the production of cutaneous β -endorphins, without inducing production of TNF- α (inflammatory cytokine).



Protocol: Incubation of normal human keratinocytes in culture with 0.1 ppm PMA (phorbol meristate) or 1ppm SEPICALM™ S. Dosage of β -endorphine and TNF- α after 48 hrs by specific immunoenzymatic assay (ELISA).

■ SEPICALM™ S 1 ppm a.m.
■ Phorbol meristate 0.1 ppm a.m.
*p < 0.05

Vocabulary: a.m.: active matter
c.p.: commercial product

NS: non-significant
LS: low significance
AP-1: Activator Protein-1

IL-6: Interleukin-6
TNF- α : Tumor Necrosis Factor- α
MMP: Matrix MetalloProteinase

ALOX: Arachidonic LipOxygenase
CCL-2: Chemokine C-C motif Ligand-2
NF- κ B: Nuclear Factor- κ B

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