

# Soothing Light Apricot

*The controlled regulation of inflammation*

## A STORY

The apricot | *Prunus armeniaca*, *Rosaceae*  
The nourishing tree coming from China

*Born in central Asia, the apricot tree is cultivated for its fruits and the beauty of its flowering since thousands years. It would have been imported in the Mediteranean area since the beginning of the Christian period through Armenia. The apricot reproduces itself thanks to its hermaphrodite flowers, and although it is hardy till the North of France, it is very sensitive to frost especially when it blooms. Then it is cultivated a lot in Mediterranean countries because of its hot climate. As fruit, it is eaten fresh or cooked for different dishes, apricot gives also an oil interesting for vitamin A and unsaturated fatty acids.*

## Key points

### An active plant cell

Developed to deliver the highest amount of original active molecules.

### A high tech natural ingredient

Created to preserve and improve the identity and the benefits of a natural product.

### An elemental soothing action

Decreases the main consequences of skin sensitivity

Because sensitive skins feels always aggressed, it is necessary to better regulate several mechanisms of inflammation. For a skin in harmony with its environment, soothed, and with a tone mor even.



SENSITIVE SKINS

## PRODUCT BENEFITS

### Soothing

#### Soothing

Calming, decreases irritations by increasing the level of skin tolerance.

#### Lightening

Helps skin to get a tone more radiant, decreases rednesses by improving its microcirculation.

*To be used in skincare or make-up products such as cream, fluid, serum, balm, lotion, milk, foundation, concealer, etc. In any cosmetic or skincare product dedicated to soothe and lighten skin.*

NÆOLYS

Related products | SOOTHING LIGHT APPLE TREE | FRAGILE VITIS FLOWER | PURE LIGHT CHINESE PEONY

**HOW IT WORKS**

# Soothing Light Apricot: decreasing major factors of skin inflammation

Soothing Light Apricot acts on two levels of the inflammatory system, the one of inflammation mediators, responsible for irritations, and the other of vasodilators, responsible for redness. Its part consists in reducing the release of those components that are scattered in skin. Most of them can be found at the level of the epidermis or dermis for blood vessels.

Thanks to those different actions, skin gets back a sensibility more consonant with its environment and keeps on fighting external aggressions.

## *in vitro* testing results

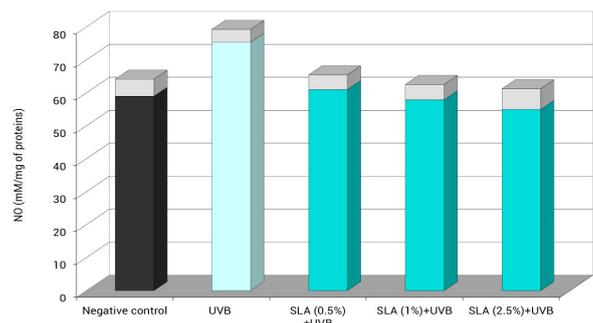
### Study in the cutaneous microcirculation

The cutaneous microcirculation is not well known but thanks to skin numerous arterioles and big volume (1.8 dm<sup>3</sup>), it plays an essential part in maintaining blood flow even if there is a heart failure. Its arterioles hold back blood through a vasoconstrictor tonus, in fact a continuous vasoconstriction. Nevertheless, as there are more venules, in general, blood circulates in them slower; that helps parietal exchanges but also leads to blood stagnancy and vasodilation. At the skin level, many vasodilations can be seen, emotional, facial reflex - due to mouth or gastric irritations, but also because of the secretion of EDRF released as a reaction to some substances including when inflammation phenomenae (with erythema) appear.

#### The study of nitric oxide, the primary EDRF

Blood vessels are made of several layers of fibrous cells, and one is directly in touch with blood: endothelium. Made of flatted cells, it plays many parts, from hemostasis to vascular tonus, for which it releases vasodilator and vasoconstrictor factors. Among vasodilators is the nitric oxide (NO), that has been identified as the essential EDRF (Endothelium Derived Relaxing Factor). It is a liposoluble gas that activates a chemical reaction, leading to the relaxing of blood vessels or vasodilation.

#### Study of Endothelium Derived Relaxing Factor (EDRF) / the nitric oxide (NO)



#### Decrease of EDRF (nitric oxide)

→ At concentrations of 0.5%, 1% and 2.5%, decrease of nitric oxide respectively by 19%, 23% and 27% (increase of 28% of nitric oxide in the non treated endothelial cells)

### Technical information Formulating Soothing Light Apricot

**INCI name of cells**  
prunus armeniaca leaf cell extract

**form**  
cells (20%) in glycerin (80%)

**aspect**  
liquid

**concentration**  
starting at 0.5%

**dispersible**  
in any formulation

## Study of the inflammation mediators

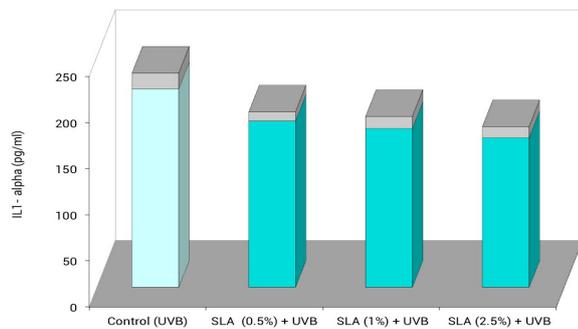
The inflammation is the answer of tissues to aggressions: all defense mechanisms through which they recognize, destroy and eliminate any foreign substances. Different types of cells take part in those mechanisms but in the epidermis, it is the keratinocytes we will study. The beginning of inflammation, its diffusion starting from the initial location involve chemical factors that are locally synthesized or at the state of inactive precursors. Naolys decided to study 3 inflammation mediators synthesized at the level of the keratinocytes of hair bulb, 2 famous cytokines and a prostaglandine.

IL1-alpha is an intracellular messenger cytokine synthesized then stocked inside cell as an inactive precursor. It has many biological local and systemic functions (on expression of genes, cell proliferation, nervous system, etc.)

IL-6 is a pro-inflammatory cytokine, that regulates activation, growth and differentiation of lymphocytes. It belongs to the group of proteins that direct to the secretion of anti-bodies to fight against extra-cellular pathogens.

PGE2 is an eicosanoïde, derived from phospholipids of cell membrans. PGE2 acts on smooth muscular fibers of vessels: vasodilatation, increase of permeability, œdema.

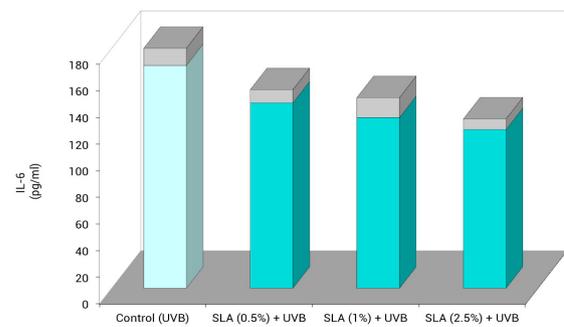
### Study of the IL-1 alpha



#### Decrease of IL-1 alpha

→ At concentrations of 0.5%, 1% and 2.5%, decrease of IL-1 alpha respectively by 16%, 20% and 25%

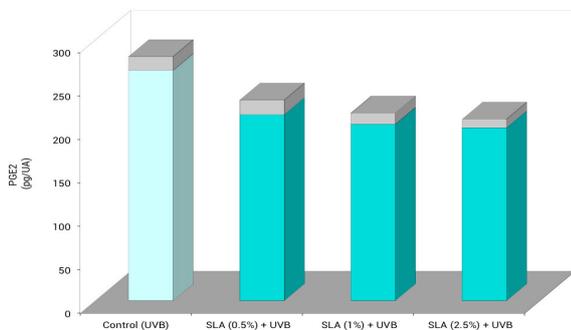
### Study of the IL-6



#### Decrease of IL-6

→ At concentrations of 0.5%, 1% and 2.5%, decrease of IL-6 respectively by 17%, 23% and 29%

### Study of the PGE2



#### Decrease of PGE2

→ At concentrations of 0.5%, 1% and 2.5%, decrease of PGE2 respectively by 19%, 23% et 25%