

Active Beauty
Unisooth™ ST-32
Skin immunity booster

Crafted by green technology and synthesis



Focus on the product

Sensitive skin: a major concern for customers

70% of women declare they have sensitive skin¹ and 62% report they have intolerance to many cosmetic products and even to water². Discomfort and redness are the major consequences of sensitive skin and daily aggressions such as UV and pollution amplify this phenomenon.

Skin possesses a strong defense system

Skin has anti-inflammatory defense molecules, also called innate immunity markers. They are considered with the Langerhans cells as the skin immune sentinels. They ensure that a pro-inflammatory aggression is detected and controlled. UV-light significantly reduces these sentinels over time. This leads to a weakened skin unable to protect itself from antigen-triggered inflammation.

Unisooth™ ST-32 reeducates skin defenses...

Unisooth™ ST-32 is a synergistic combination of Tamarind polysaccharides and of Stevioside. While Tamarind polysaccharide is well-known for its soothing capacities³ and protection against UV-induced damages, Stevioside has shown strong anti-inflammatory properties⁴.

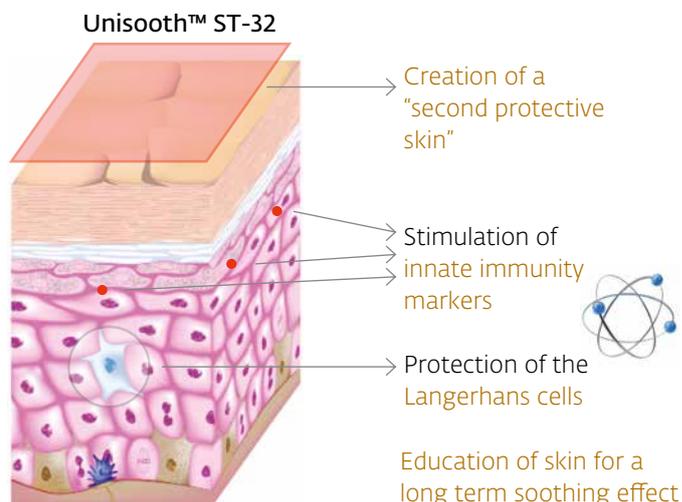
This combination offers a powerful "boosting action" on sensitive skins, creating a "second protective skin" to reduce irritation and prepare skin to defend itself against future external aggressions.

... and restores innate defenses for a long term soothing efficiency

Unisooth™ ST-32 directly boosts two major skin defense elements to help reduce skin irritation:

- ▶ It stimulates the innate immunity markers, which are the first line of defense of the skin against external stress.
- ▶ It protects the Langerhans cells, which help facing aggressions and preventing skin irritation.

A clinical study on 25 volunteers has demonstrated a significant decrease of skin sensibility and redness, after only 24h of treatment.



¹ IPSOS Health & Beauty, 2005

² Br J Dermatol 2001;145:258-63

³ Photochem Photobiol 69(2):141-7, 1999

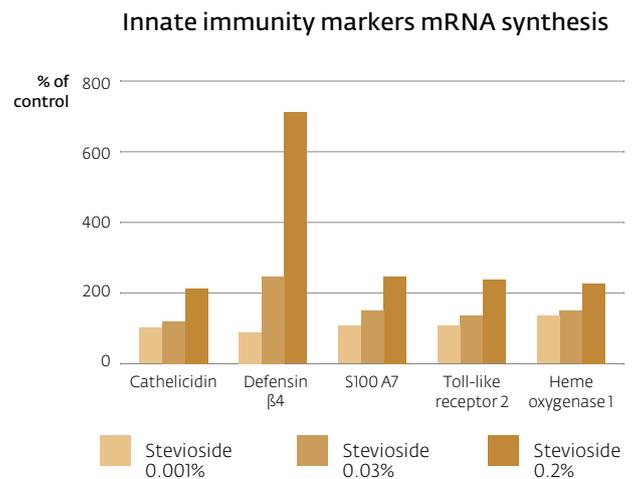
⁴ J Agric Food Chem 54(3):785-9, 2006

Biological activity

Stimulation of innate immunity markers (*in vitro* test)

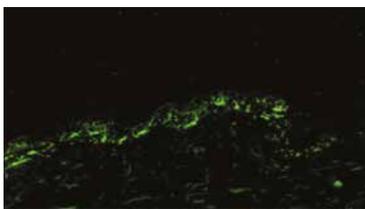
Unisooth™ ST-32 was tested for its ability to stimulate the innate immunity markers to help recover from external aggressions. Normal human epidermal keratinocytes were incubated for 24 hours in a medium containing or not containing Stevioside, one of the active molecules of Unisooth™ ST-32.

Results: 0.2% of Stevioside, one of the active molecules of Unisooth™ ST-32, increases mRNA synthesis of major innate immunity markers: +112% for cathelicidin, +596% for Defensin β 4, +150% for S100 A7, +147% for Toll-like receptor 2 and +142% for Heme oxygenase 1.

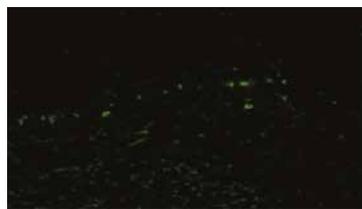


Protection of Langerhans cells (*in vitro* test)

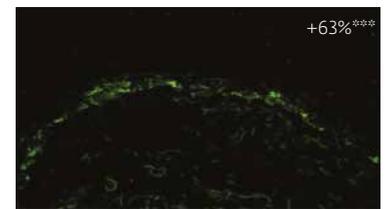
Unisooth™ ST-32 was tested for its ability to protect Langerhans cells. Skin explants were treated with Unisooth™ ST-32 at 3% and incubated for 24h. The explants were then rinsed and treated with Unisooth™ ST-32 at 3% and finally UVB-irradiated. Only Langerhans cells exhibiting marked green fluorescence and having normal morphology were counted by using a Nikon E400 microscope for observations.



Control



Control + UVB



Control + UVB
+ Unisooth™ ST-32 3%
+63%***

Results: Treatment with Unisooth™ ST-32 at 3% significantly protects by 63% Langerhans cells (in green fluorescent here) from UV-induced depletion.

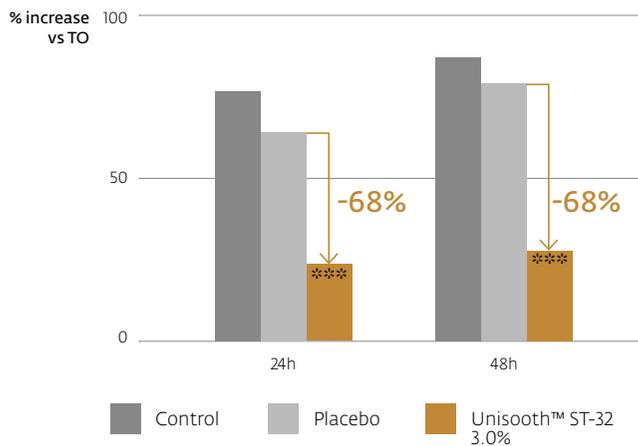
***p<0.001, Student's t Test

Efficacy

Reduction of skin sensitivity (clinical efficacy)

Unisooth™ ST-32 was tested for its ability to reduce skin reactivity (TEWL) and chemically induced redness. The study was run on 25 human volunteers. The minimal erythema dose (MED) was determined for each person regarding the phototype, and 9 areas were used on their back to test the products: 3 for Unisooth™ ST-32 at 3%, 3 for a placebo and 3 were untreated (TO). 6 hours after the treatment areas were UV-irradiated. Erythema index (Mexameter®) and Trans-Epidermal Water Loss (Tewameter®) were evaluated after 24 hours and 48 hours.

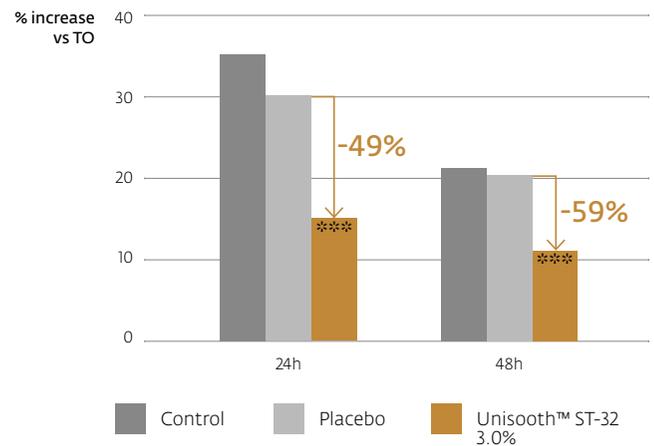
Skin reactivity (Trans Epidermal Water Loss)



Results: A preventive treatment with Unisooth™ ST-32 at 3% reduces skin reactivity (UV-induced TEWL) of -68% after 24h and -68% after 48h compared to placebo.

***p<0.001 vs placebo, Student's t Test

UV-induced redness



Results: A preventive treatment with Unisooth™ ST-32 at 3% reduces UV-induced skin redness of -49% after 24h and -59% after 48h compared to placebo.

***p<0.001 vs placebo, Student's t Test

Summary



Technical information

INCI:	Water (and) Pentylene Glycol (and) Tamarindus Indica Seed Extract (and) Stevioside
Origin:	Tamarind + Stevia + Organic synthesis
Preservation:	Preservative free
Appearance:	Colourless, slightly opalescent liquid
Solubility:	Water-soluble
Dosage:	1-3%
Processing:	Stable at a wide range of pH (pH 2-13). Can be heated up to 120°C for 1 hour the product will remain stable. Product is stable in presence of Hydrogen Peroxide Neutraliser and Thyoglycolates.

Claims

Claims:	Long term soothing, stimulation of skin's innate immunity system, protection from environmental stress
Applications:	Sensitive skin care, protective treatment, anti-redness treatment, calming cream

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