

Gattefossé unveils Solastemis™, the next step towards photoprotection

Solastemis™
Guardian of DNA



Press Release

Lyon, France - April 4th 2022

in-cosmetics global marks the launch of Solastemis™, Gattefossé's new active ingredient from plant origin.

With Solastemis™, Gattefossé offers brands, particularly in dermo-cosmetics, a powerful active ingredient to protect the skin against UV rays and responds to the growing needs of consumers concerned about the health of their skin.

A physical barrier between the inside and the outside, the skin is one of the most responsive organs to external aggressions, particularly to UV light. UV strongly impacts the nuclei of skin cells, the DNA, leading to structural and functional alterations of the different layers of the skin.

A research program on the effects of UVA on epidermal stem cells

A few years ago, Gattefossé skin biology team partnered with a research group specialized in the study of genotoxic stress to study the effects of UVA radiation on epidermal stem cells.

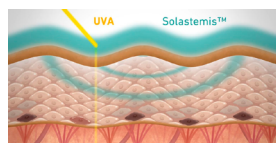
Out of this collaboration, it was discovered that epidermal stem cells have a great capacity to fight UVA aggressions, greater than their daughter cells, thanks to more efficient repair mechanisms⁽¹⁾. However, they remain sensitive to UVA induced-DNA damage and lose part of their self-renewal capacity, their so-called "stemness" potential, ultimately related to functional and structural alterations of the epidermis.

Preserving the cellular integrity from UVA rays

Gattefossé developed a natural active ingredient named Solastemis™ which can counteract the undesired consequences of UVA radiation⁽²⁾.

Solastemis™ acts at the heart of the epidermis mechanics, by protecting the DNA of keratinocytes from lesions induced by UVA radiation and by boosting endogenous DNA repair system. It preserves the stem cells of the epidermis ensuring proper homeostasis for the skin's first line of defense.

It also offers a shield for the dermal extra-cellular matrix by protecting key macromolecules (collagen, elastin) from degradation induced by solar exposure.



Discover Solastemis™
[in video.](#)



"One of the primary strengths of Solastemis™ is its ability to provide a biological protection against UVA-induced epidermal damage. UVA radiation is commonly associated with photo-aging, based on its ability to penetrate human skin deeper than UVB radiation, deep down to the dermis.

However, UVA radiation strongly affects the epidermis, notably by affecting the self-renewal potential of keratinocyte stem-cells, thereby compromising the constant renewal of the epidermis. Solastemis™ has been shown in vitro to reduce oxidative stress within epidermal keratinocytes and to improve endogenous DNA repair system, both of which contribute to the preservation of epidermal self-renewal potential.

Interestingly, it provides significant protection to the dermis as well making it a perfect solution for global photoprotection at epidermal and dermal level."

Boris VOGELGESANG
R&D Director Cosmetic Actives

Healthier and brighter skin tone, reduced wrinkles

Tested versus placebo on a panel of 33 caucasian women (37 to 55 y.o.), Solastemis™ confirmed its capacity to reduce symptoms of photoaging.

Results show a significant reduction of crow's feet wrinkles combined with an overall improved skin smoothness. Skin tone is embellished for a more lucent, even, and healthier complexion.



Before



After

Vol.21

Sustainably sourced on La Réunion Island

Solastemis™ features a truly natural composition. Active molecules are extracted from *Sechium edule* (also known as chayote or christophene), a fruit cultivated and manually harvested following zero-waste principles, in the majestic cirque of Salazie, on La Réunion island. Long-lasting relationships with local producers and harvesters guarantee Gattefossé a perfect traceability and quality, from field to factory.

As part of its CSR program, [Gatt'Up & Act](#), Gattefossé undertook different initiatives to ensure the financial stability and the technical evolution of this supply chain (supply agreement, financing of equipment...).

The extraction through Natural Deep Eutectic Solvents technology (NaDES) and a tailor-made manufacturing process (minimal number of processing steps and limited duration) make it possible to obtain an eco-designed ingredient (99.85% natural origin content – ISO 16128) associated with biological high performance.



"With skin care shifting to skin health care, the need of health-centric cosmetic products is dramatically increasing. In the field of skin health, UV protection is a central topic and photoaging a never-ending concern.

With Solastemis™, Gattefossé pushes the boundaries of photoprotection. This active has been developed with the objective of providing a deep protection of the cellular integrity against UVA radiation, by acting at the heart of our cells, in DNA.

*This ingredient is the result of several years of research by our experts in sourcing of natural products, plant chemistry, cell biology, and clinical evaluation. They combined their know-how to make to most of an exotic fruit, *Sechium edule*, and transformed it into a highly potent active ingredient".*

Laurie CANEL

Product Marketing Leader - Personal Care Actives

Discover Solastemis™ at [in-cosmetics global](#),
in Paris from April 5 to 7, on Gattefossé stand – M50.

For more information, [visit our website](#)

About Gattefossé

The Gattefossé Group is a community of employees, all driven by a dual mission: the performance of its products and the personalized support of its customers.

Gattefossé develops, manufactures and sells pharmaceutical excipients and cosmetic ingredients of natural origin for the beauty and health industries worldwide, through its 12 affiliated companies and network of global agents and distributors in 80 countries.

Specialist in lipid chemistry and plant extraction, Gattefossé offers recognized expertise in formulation using its 4 Technical Centers of Excellence in France, China, India and the United States.

Environmental and social issues have always been part of the culture of this French family business, founded in Lyon in 1880. Today, Gattefossé relies on a purposeful CSR approach to build its innovation and development strategy.

Media relations

Claudine Blondet
cblondet@gattefosse.com
Tel.: +33 4 26 04 19 81
www.gattefosse.com

