bettech

InBetta

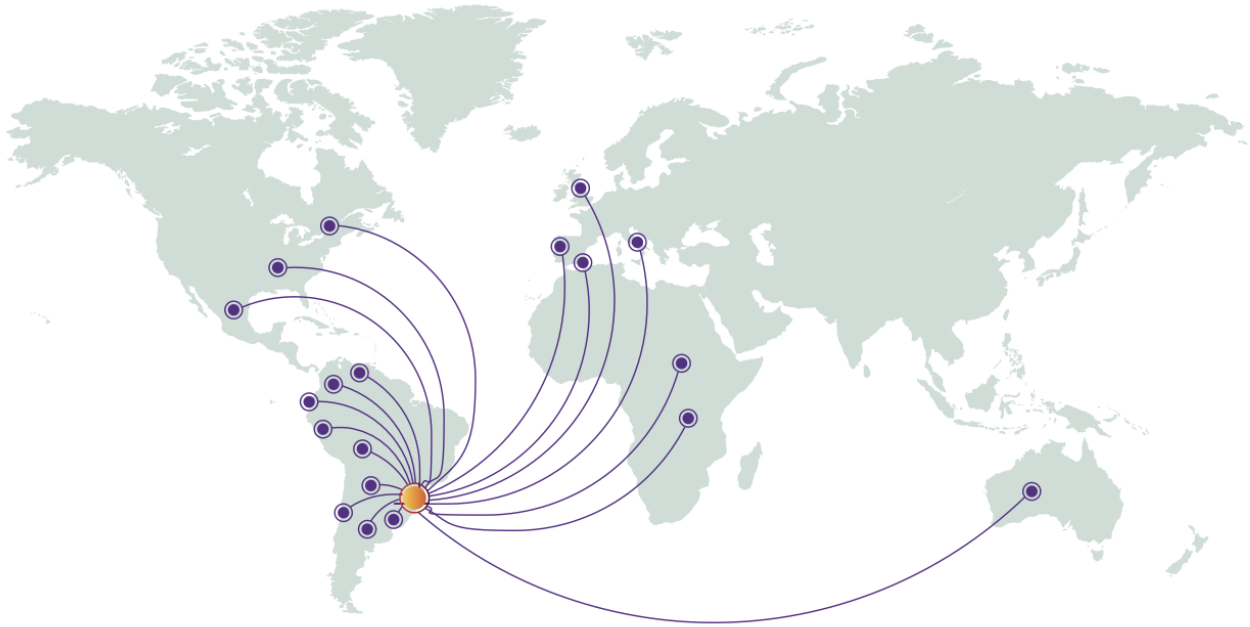
Bettech is part of InBetta, a holding company that uses creativity to make your life easier. Currently, its more than 5,000 products are a benchmark in the market, bringing together other companies such as Bettanin, Atlas, Sanremo, Ordene, Lanossi, Super Pro and LOTS Home Shop.

BETTANIN

ATLAS

SANREMO

ORDENE



SuperPro BETTANIN

LANOSSI beauty & care

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LOTS HOME SHOP


BETTANIN
BETTANIN

TIMELINE

2019

Corporate R&D and Partnership with Universities Development.

2020

Development of nanostructures.

Market study of nanoactive ingredients for the cosmetics industry.

2021

Development of the Pilot Project for the manufacture of nanoparticles.

Definition of products and portfolio.

2022

Creation of the **Nano Solutions** brand.

In vitro testing and validation of the developed products.

2023

Start of **Nano Solutions**' commercial operations.

Participation in trade fairs in Brazil and the United States.

Development of international partnerships.

2024-2025

Rebranding to **BETTECH** align with domestic and international brands.

Expansion of international partnerships across all continents.

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EFFECTIVENESS?

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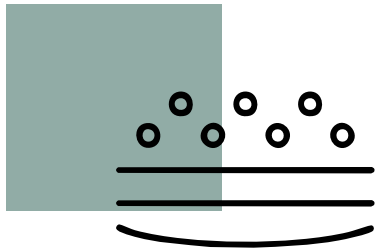
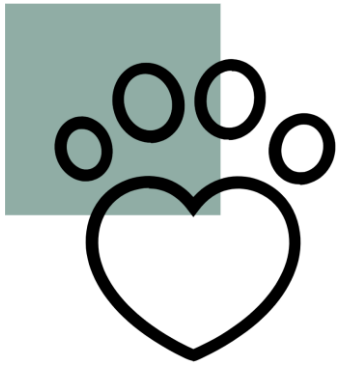
OUR TECHNOLOGIES

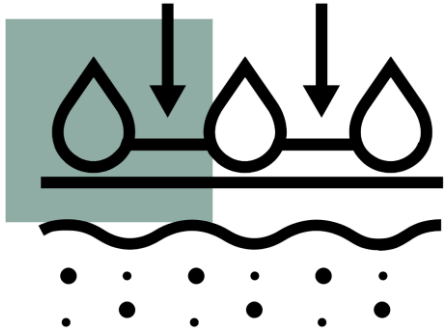
ACTIVE INGREDIENT PROTECTION



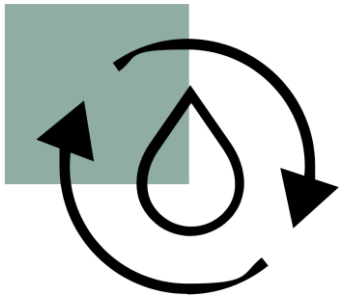
GREATER SURFACE COVERAGE



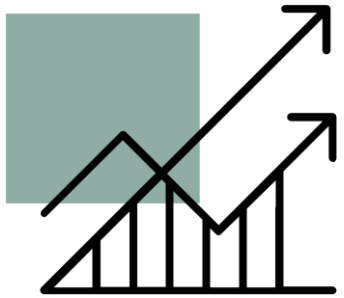
CRUELTY FREE



PERMEATION



CONTROLLED RELEASE



MAXIMIZATION OF INGREDIENT EFFECT

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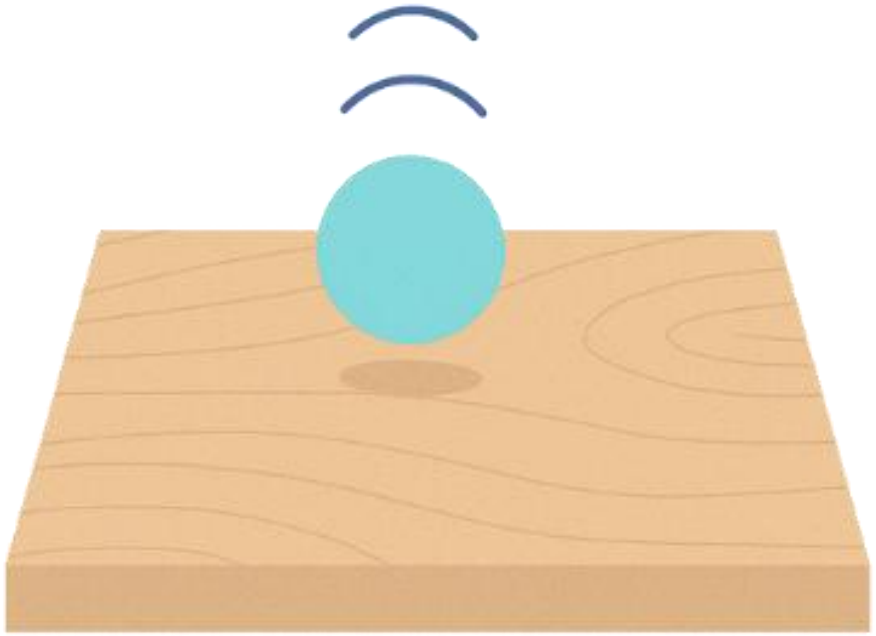
PROTECTION

Active ingredients oxidise easily upon contact with oxygen, losing efficacy and altering the product’s colour.

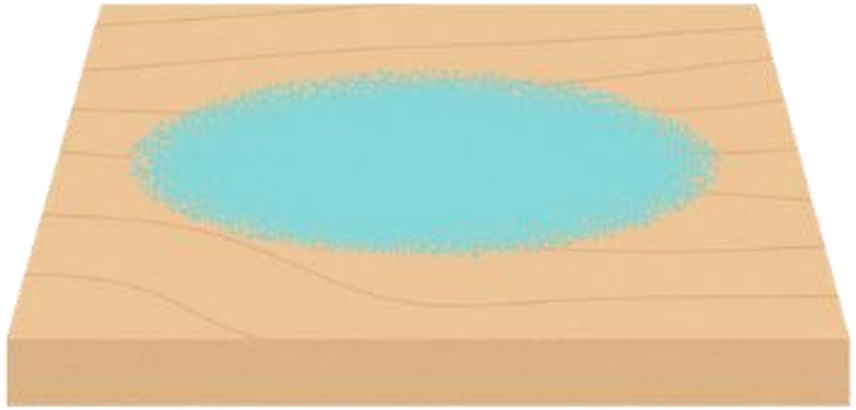
They can also react with each other within the formulation, compromising stability.

Encapsulation protects the active ingredient, preserving its benefits and preventing undesired interactions.

MOLECULE *versus* PARTICLES – Surface Coverage



ACTIVE INGREDIENT



NANOENCAPSULATED INGREDIENT

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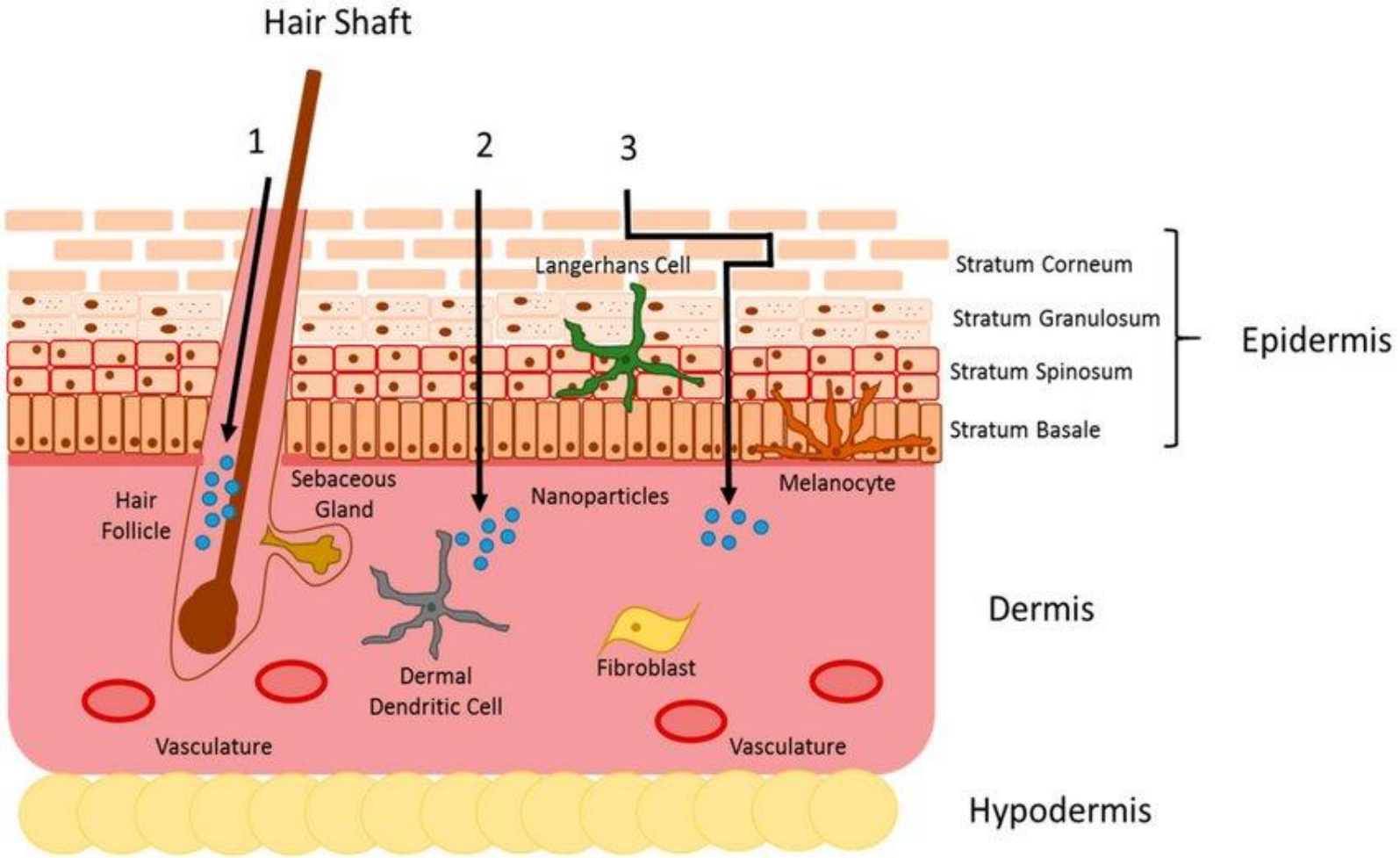
PERMEATION PATHWAYS

1) **FOLLICULAR ROUTE**: Ingredients bypass the *stratum corneum*.

2) **INTRACELLULAR ROUTE**: Chemical reactions occur inside the cells.

3) **INTERCELLULAR ROUTE**: Through a network of small channels.



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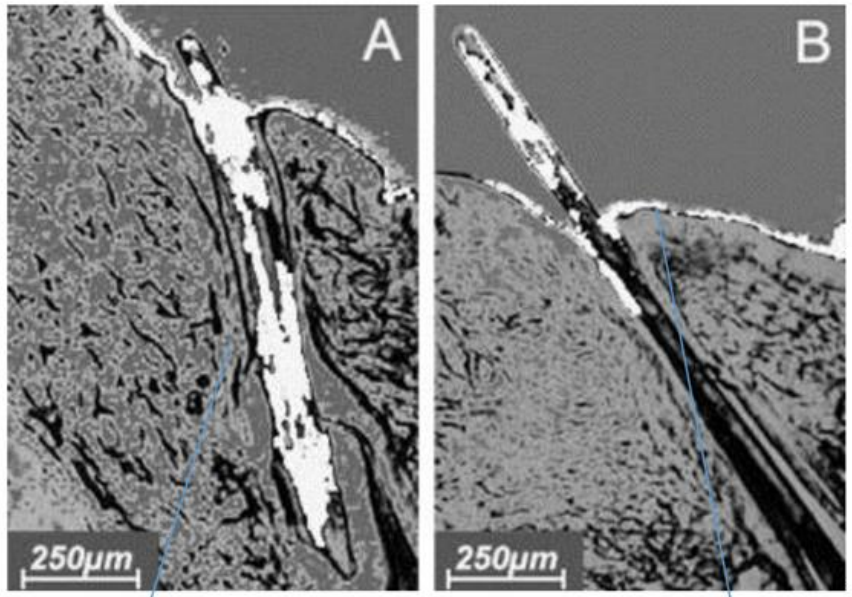
PERMEATION PATHWAYS – FOLLICULAR SPACES

The follicular space is approximately 300 nm, which facilitates the penetration of nanoparticles ranging from 100 to 300 nm through this route.



GEL BASE WITH NANOPARTICLES

GEL BASE WITH FREE ACTIVE

#ICosmetologia

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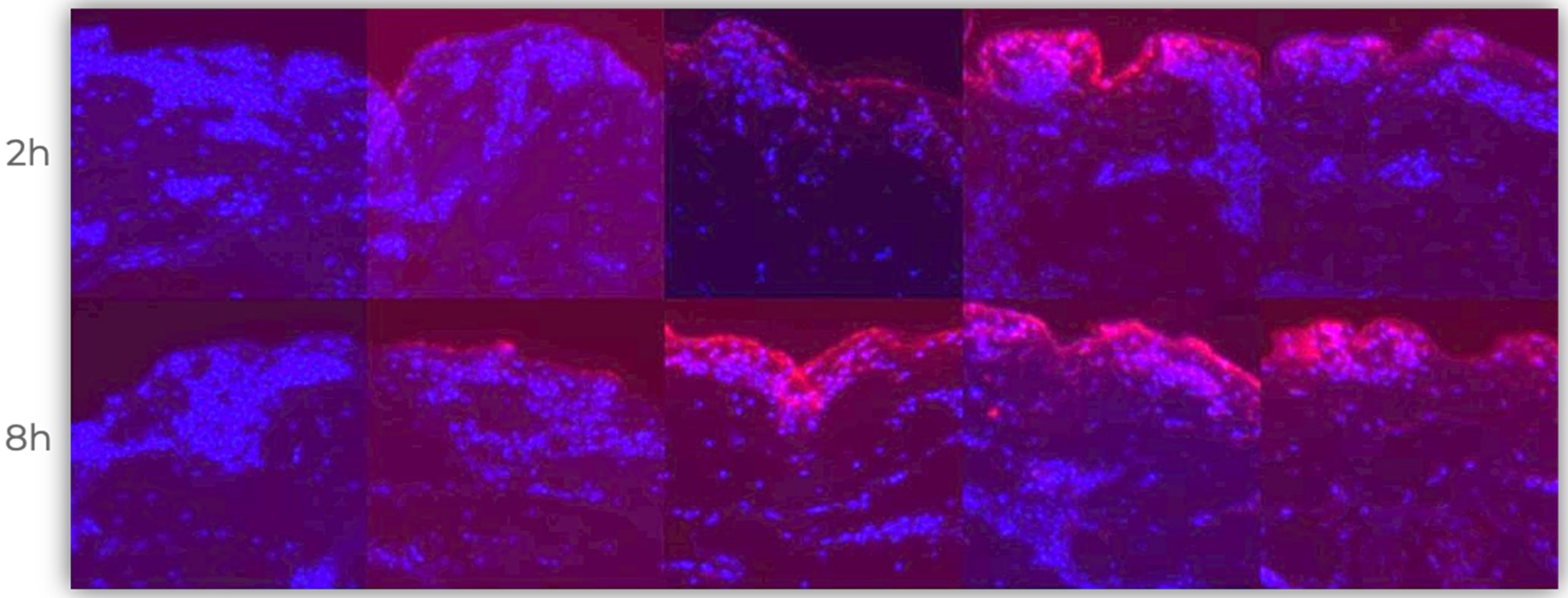
PERMEATION TESTS

* The tests show permeation of the epidermis.



CONTROL	FREE INGREDIENT	LIPOSOMES	NANO-POLYMERIC	HEXOSOMES
	32,38% (±4,64)	64,08% (±2,68)	79,87% (±7,52)	67,16% (±10,35)

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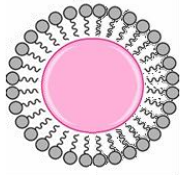
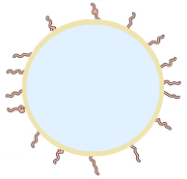
DELIVERY SYSTEMS

LIPOSOMES

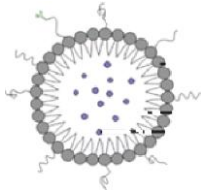
HEXOSOMES



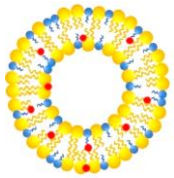
NANO-EMULSION



NANO-POLYMERIC



LIPID POLYMER HYBRID



TRANSFERSOMES

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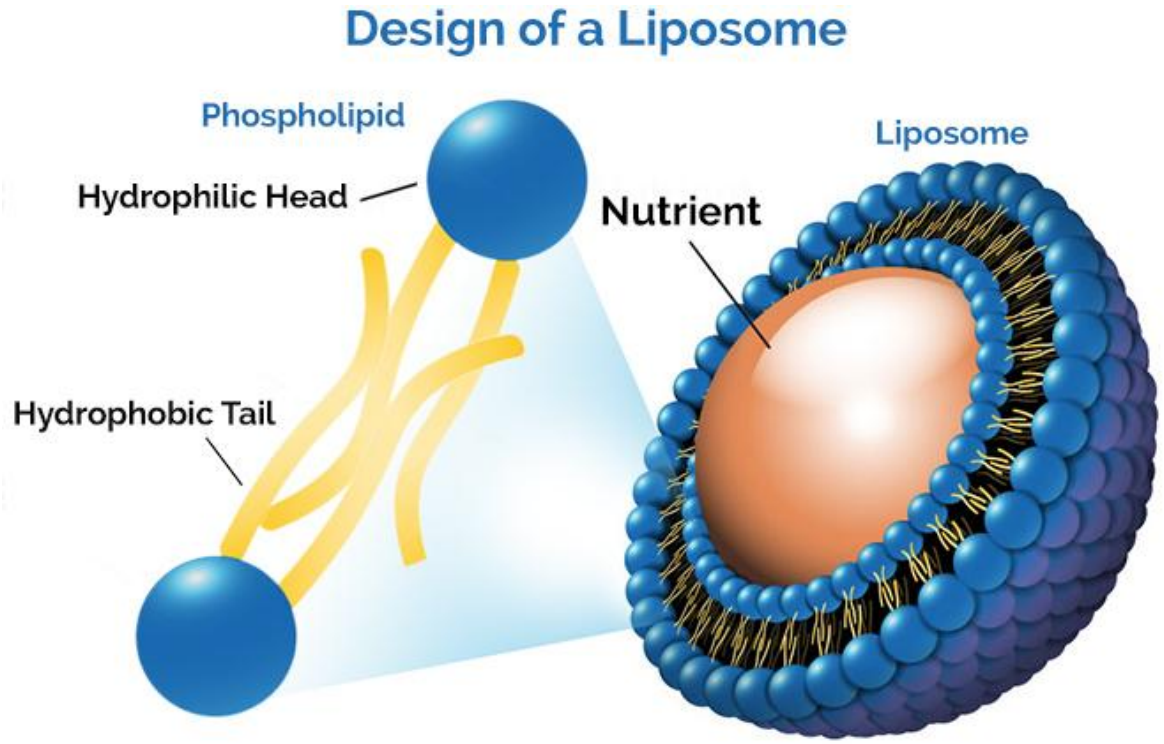
LIPOSOMES

A liposome is a **spherical vesicle composed of one or more lipid bilayers**, usually made of **phospholipids**, like cell membranes, facilitating penetration into the skin due to the interaction with the stratum corneum.

Once the liposome permeates the epidermis, enzymatic degradation by lipases triggers the rupture of the vesicles, releasing the active ingredient. This process occurs either in the epidermis or the dermis, depending on the formulation and target site of action.



LIPOSOMES

- **NS ASCORBIC ACID**
- **NS NIACINAMIDE**
- **NS RENEW**
- **NS BTX**
- **NS TRANEXAMIC ACID**
- **NS PHYTO CERAMIDE**

These substances were encapsulated because they are hydrophilic, meaning they have a natural affinity for the aqueous core of the liposome.

APLICATIONS
Hydrophilic gels, serums, lotions, creams, aqueous and low lipid O/W emulsion-type.

INCOMPATIBILITIES
Products with high content of surfactants and/or lipids.

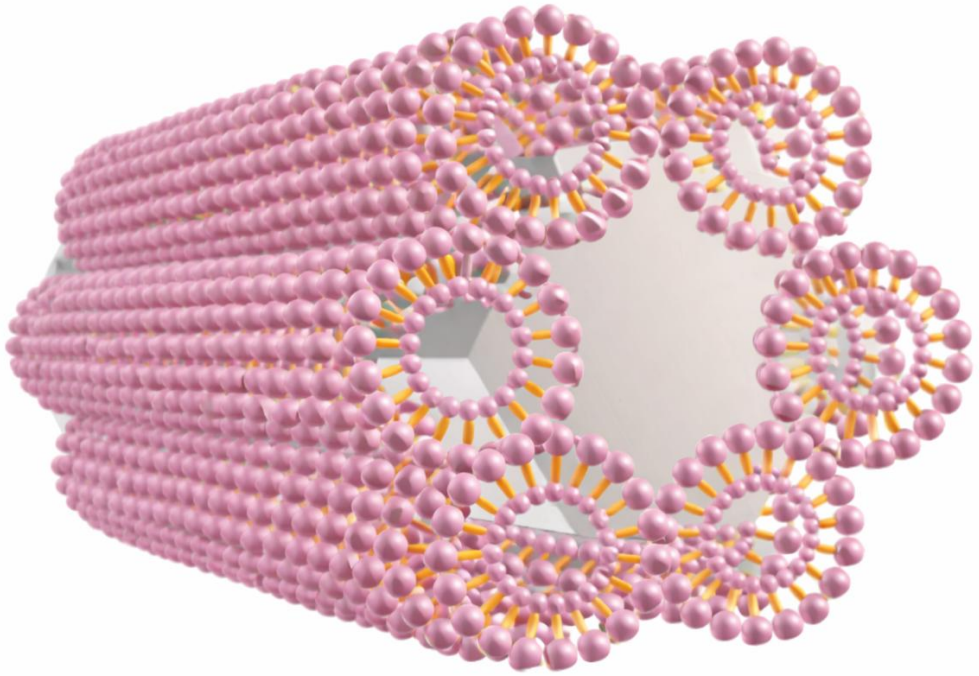
HEXOSOMES

The hexosomes are composed of reverse cylindrical micelles that self-assemble into a hexagonal packing structure. The capsule interacts with the stratum corneum through permeation agents with lipid-like characteristics, facilitating skin penetration.

Once inside the epidermis, the release of the active ingredient occurs through diffusion, driven by pressure differences and structural openings in the capsule, allowing delivery to either the epidermis or dermis.

What differ our Hexosome from the Exosomes?

- Exosomes are biotechnologically derived from plant stem cells.
- Hexosomes are a synthetic nanotechnology.



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HEXOSOMES

- **NS BAKUCHIOL**

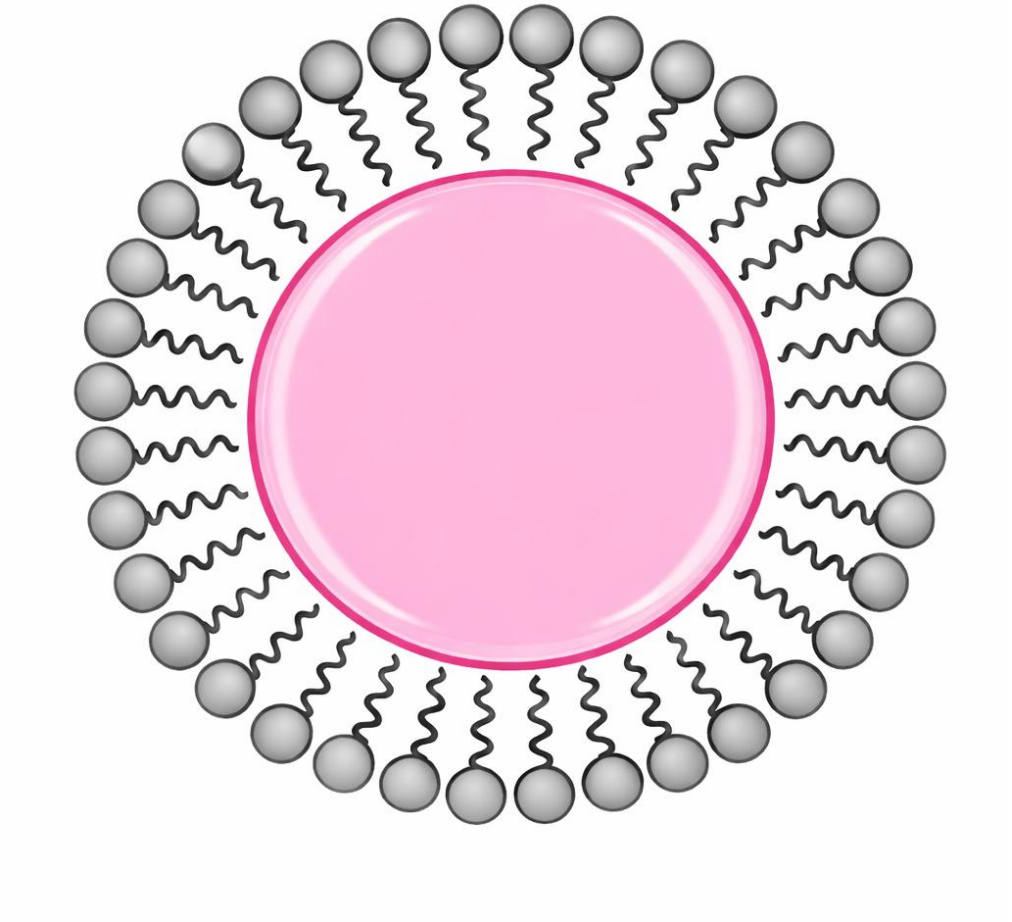
This active was encapsulated using this nanotechnology due to its chemical structure and high affinity with the components of the hexosome, ensuring better stability and controlled delivery.

APLICATIONS
Hydrophilic gels, serums, lotions, creams, aqueous and low lipid O/W emulsion-type.

INCOMPATIBILITIES
Products with high surfactant content as well as highly oily base.

NANO-EMULSION

The nano-emulsion capsules are typically structured as either oil-in-water (O/W) or water-in-oil (W/O) emulsions. In an oil-in-water system, the internal phase consists of oil droplets dispersed in an aqueous external phase. This structure enables the effective delivery of hydrophobic actives within an aqueous environment, promoting better stability and absorption.



NANO-EMULSION

- **NS HYALURONIC ACID**
- **NS SALICYLIC ACID**
- **NS ICARIDIN**

These products were encapsulated in Nano-emulsion, because:

I. **Salicylic Acid** is lipophilic (hydrophobic) active, which has an affinity for oily substances. Nano-emulsion, a mixture of oil in water (or vice versa), solubilizes salicylic acid in the oily phase.

II. **Hyaluronic Acid** is hydrophilic active, which fits well in the aqueous phase of the nano emulsion.

APLICATIONS
Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products and emulsion type O/W.

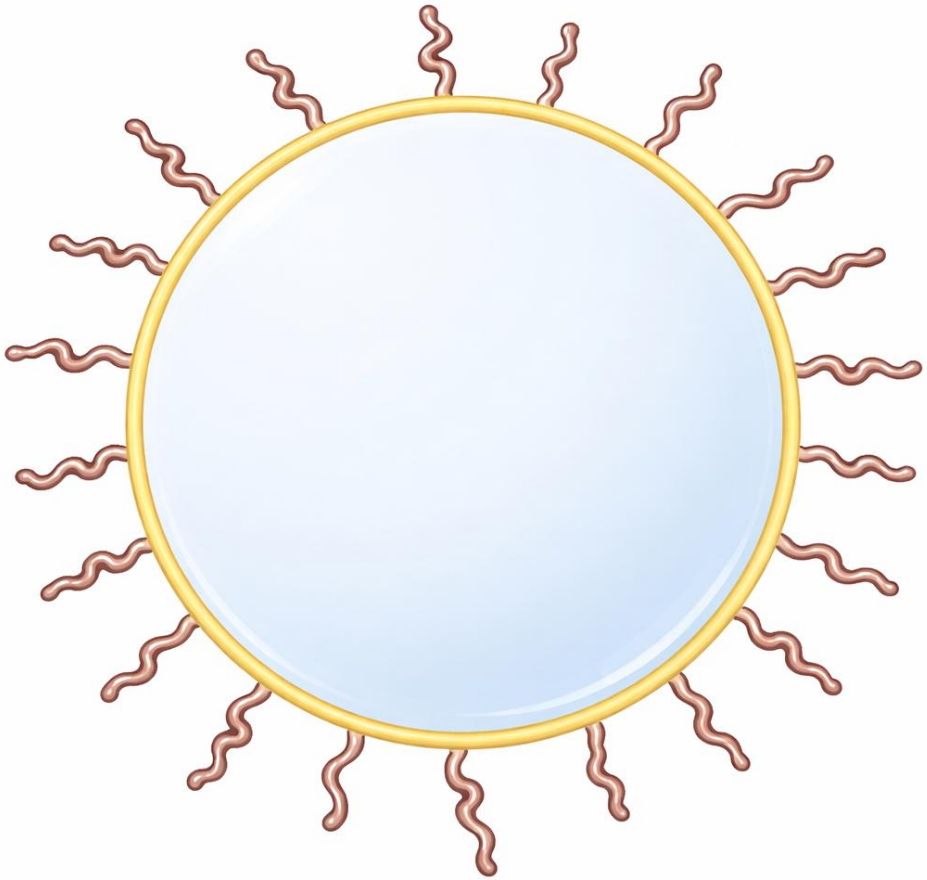
INCOMPATIBILITIES
Products with high surfactant content, as well as highly oily bases and bases with high concentration of salts.

NANO-POLYMERIC

Nano-polymeric capsules are composed of a polymeric core surrounded by permeation-enhancing agents. The polymeric core provides structural integrity and controlled release properties, while the outer coating facilitates interaction with the skin barrier, improving penetration and bioavailability of the encapsulated active ingredients.

What about the PCL Biodegradable Polymer?

PCL is a biodegradable polymer that undergoes hydrolysis of its ester bonds, a process catalyzed by enzymes such as lipases. As the nano-polymeric capsule degrades, the active ingredient is released, and the remaining PCL fragments are metabolized and eventually excreted.



NANO-POLYMERIC

- **NS ENERGIZE**
- **NS COENZYME Q10**
- **NS RESVERATROL**
- **NS RETINOL PALMITATE**
- **NS TOCOPHEROL ACETATE**
- **NS QUERCETIN**
- **NS ASTAXANTHIN**
- **NS CHLORELLA**
- **NS PHYCO**
- **NS OLIVE UPCYCLING**
- **NS RETINOL**

These substances are soluble in organic media; the technology enhances their stability due to their chemical bonds.

APLICATIONS
Serums, lotions, creams, aqueous or O/W emulsion-type cosmetic products.

INCOMPATIBILITIES
Oily excipients with chemical structure of aromatic rings.

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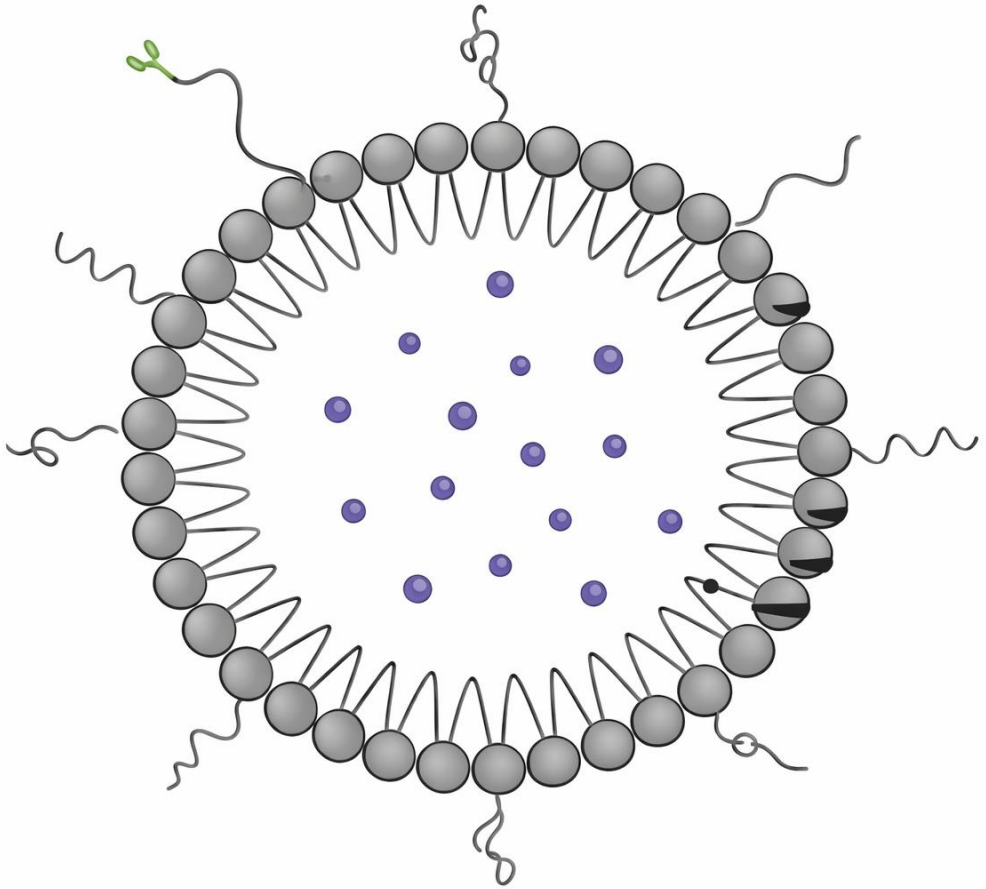
LIPID-POLYMER HYBRID

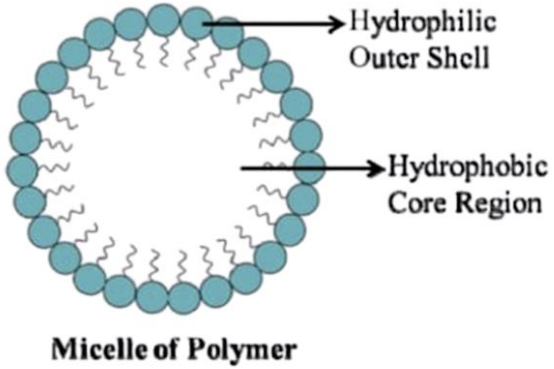
The lipid-polymer hybrid capsule combine the advantageous characteristics of both polymeric nanoparticles and liposomes. These hybrid systems are composed of a polymer core surrounded by a lipid shell, creating a stable and versatile platform for drug delivery.

The polymer core serves as the primary compartment for encapsulating agents, particularly hydrophobic ingredients, ensuring controlled and sustained release. Surrounding this core is a lipid shell, which mimics biological membranes and provides biocompatibility, improved stability in physiological environments, and protection against premature degradation.

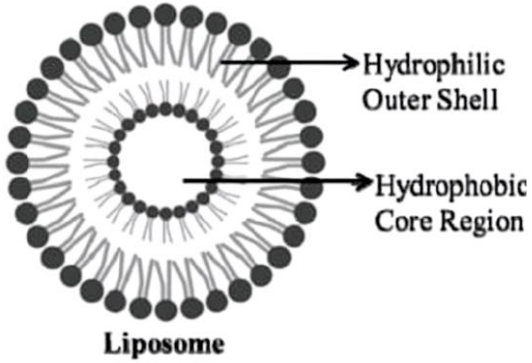


LIPID-POLYMER HYBRID

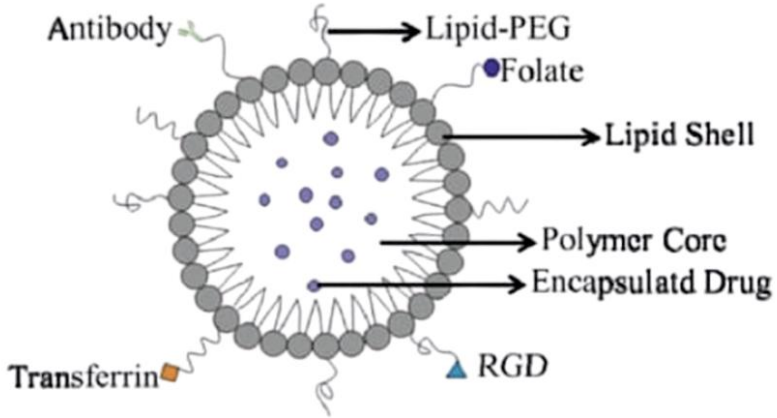
- **NS SENEINA**
- **NS CERAMIDE**



Micelle of Polymer



Liposome



Lipid Polymer Hybrid Nanoparticle

APLICATIONS

Serums, lotions, creams, and aqueous or O/W emulsion-type cosmetic products.

INCOMPATIBILITIES

Products with high levels of surfactants and/or lipids.

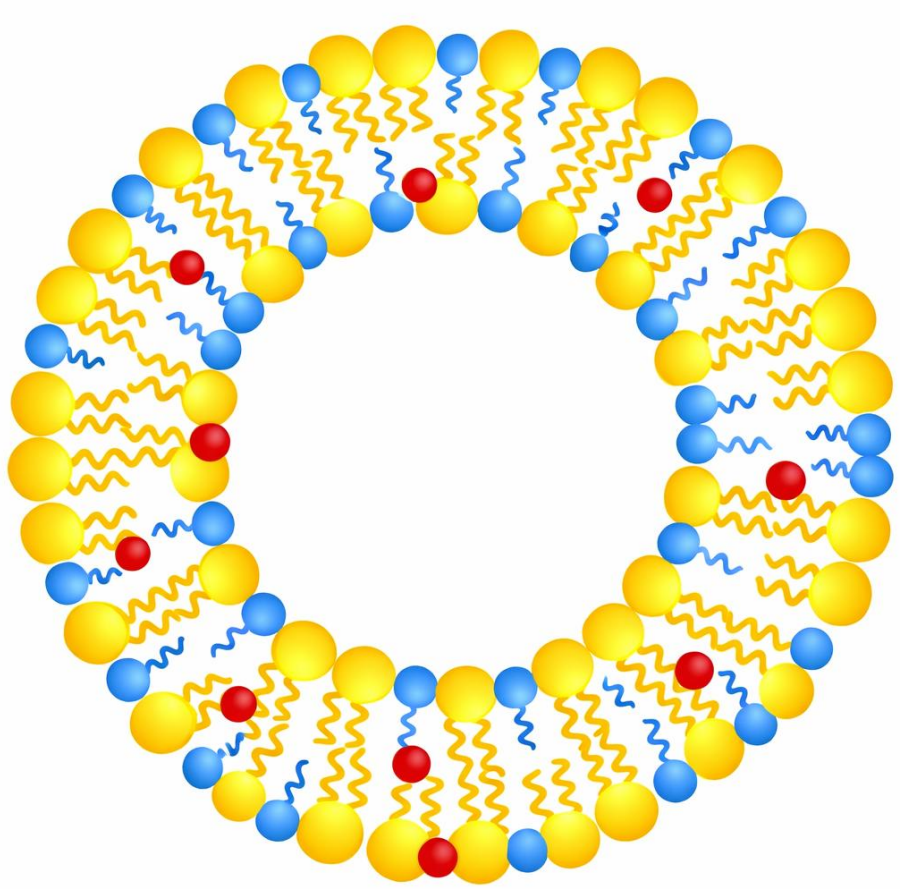
TRANSFERSOMES

Transfersomes are **ultradeformable vesicles** similar to liposomes, composed of a phospholipid bilayer surrounding an aqueous core. Their key distinguishing feature is the presence of an **edge activator**, which provides high flexibility and allows the vesicles to deform and pass through skin pores smaller than their own diameter. As a result, transfersomes are particularly effective for transdermal delivery, enabling both hydrophilic and lipophilic ingredients to penetrate deeply into the skin in a non-invasive manner.

- **NS CLEARDRUFF**
- **NS HYDRAFIBER**

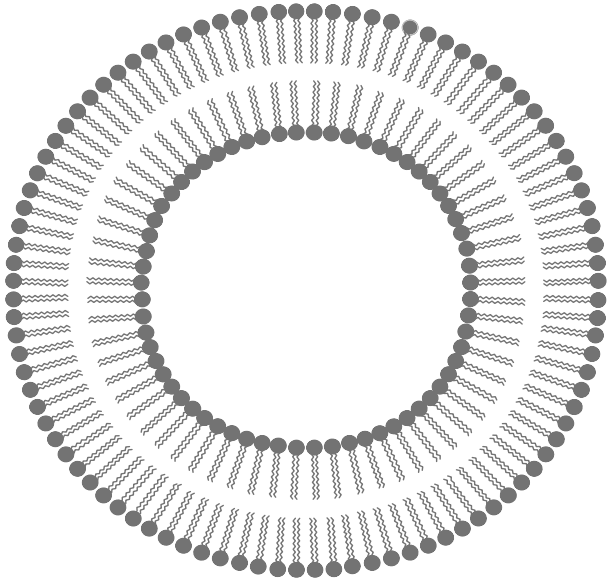
APLICATIONS
Hair treatment.

INCOMPATIBILITIES
Non-aqueous media.



CONTROLLED RELEASE

BETTECH’s nanoparticle delivery systems ensure a prolonged effect of the active ingredient on the cells.



ENZYMATIC

Enzymatic release occurs in the skin, where specific enzymes, such as lipase, **degrade the nanoparticle matrix**, releasing the encapsulated active ingredient. This method is useful for controlled administration.

DIFFUSIONAL

In the diffusion-based release process, the active ingredient is released from the nanoparticles by diffusion, moving from a region of higher concentration to one of lower concentration.

TECHNICAL MATERIALS

LITERATURE: Efficacy tests, INCI and CAS numbers, and physicochemical properties, statements (Microplastics, SDS, BSE-TSE, etc.).

TECHNICAL DOSSIER: Statements, technical specifications, and composition.

PARTICLE SIZE ANALYSIS: Analysis that ensures particle size safety, following strict technical standards.

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WHY USE NANOTECHNOLOGY?

	FREE INGREDIENT	BETTECH'S NANOENCAPSULATION
STABILITY	Instability when exposed to light, heat, and oxidation.	Protection against environmental factors.
COMPATIBILITY	Difficulty formulating with multiple active ingredients.	Greater combability between ingredients.
COVERAGE	Uneven distribution on the skin surface.	Uniform and effective coverage.
PERMEATION	Low penetration into the skin layers.	High penetration into deeper layers.
SOLUBILITY	Low solubility of the active ingredient.	Excellent solubility and dispersion.
RELEASE	Rapid and uncontrolled release.	Gradual and prolonged release of the active ingredient.
COST-BENEFIT	Higher formulation cost.	Optimised cost.

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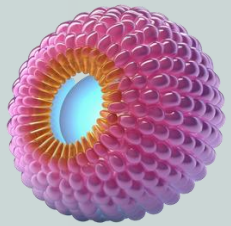
CUSTOMISED PRODUCTS



Your own nanoencapsulated active ingredient.

Technical support for conducting efficacy tests.

Resolution of stability, odour, colour, and other issues.

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NS
ASCORBIC ACID
VC

NS
HYALURONIC ACID
HA

NS
SALICYLIC ACID
SA

NS
OLIVE UPCYCLING
Ov

NS
ASTAXANTIN
Ax

NS
CHLORELLA
Ch

NS
BAKUCHIOL
Bk

NS
BTX
BTX

NS
RENEW
RW

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TRANEXAMIC ACID
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RV

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RETINOL
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Q10

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RETINOL PALMITATE
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TOCOPHEROL ACETATE
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PHYTO CERAMIDE
PCe

NS
ICARIDINA
Ic

NS
NIACINAMIDE
NS

NS
CLEARDRUFF
CD

NS
HYDRAFIBER
NFi

bettech

VOLUMES

DON'T WASTE YOUR INVESTMENT.

WE HAVE THE PERFECT VOLUME FOR YOUR PROJECT.

NS

BAKUCHIOL

BK

Composition:

BAKUCHIOL

Bakuchiol is a plant-derived active ingredient recognised for its effectiveness in reducing fine lines and wrinkles, promoting greater firmness, elasticity, and a rejuvenated appearance of the skin. Through nanoencapsulation, its release is optimised in the deeper layers of the skin, resulting in visibly healthier skin with reduced oiliness, improved texture, and a more even tone.

Anti-inflammatory action.

Soothing effect on the skin.

Reduction of **oiliness**.

Stimulation of **collagen synthesis**.

Improvement of skin **firmness** and **reduction of sagging**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Hexossoma	Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products, and O/W type emulsions with low lipid content.	0,5 to 5%	Products with a high content of surfactants, as well as highly oily bases.	Diffusional gradient (slow release)	4,0 - 8,0	Slightly yellowish	Milky	Water dispersible	20 – 35°C at the end of the process

NS

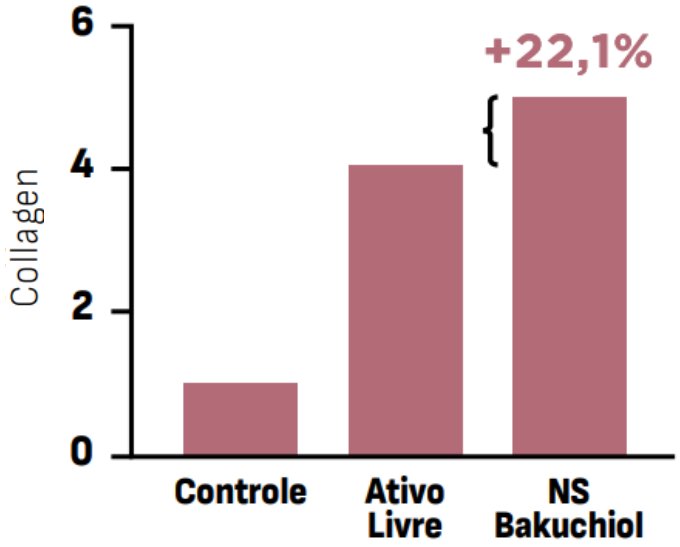
BAKUCHIOL

BK

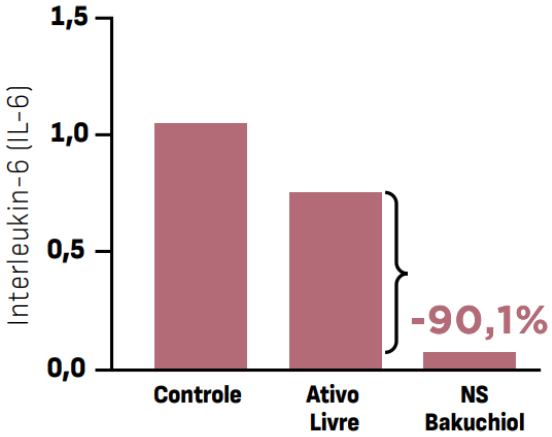
Composition:

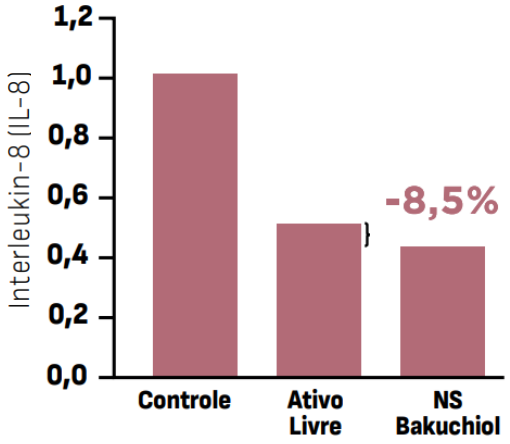
BAKUCHIOL

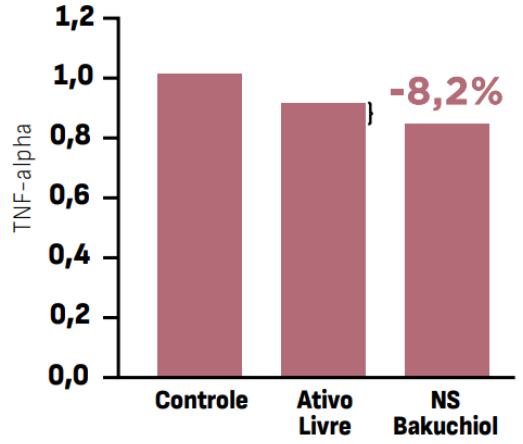
SKIN FIRMNESS



DERMOCALMING EFFECT







NS

BTX

BTX

Composition:
TRIPEPTIDE

Reduction of **facial muscle cell contractility**.

Anti-wrinkle action through the **reduction of expression line depth**.

NS BTX is a nanostructured form that provides a safe and non-invasive botox-like effect. The active ingredient promotes relaxation of the facial muscles, reducing the depth of expression lines and delivering a smoother, more rejuvenated appearance. Nanocapsulation technology enhances penetration and stability, ensuring controlled release targeted to the muscle tissue. The result is skin with an immediate and long-lasting lifting effect.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Liposome	Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products, and O/W type emulsions with low lipid content.	1 to 5%	Products with a high content of surfactants and/or lipids.	Enzymatic (slow release)	4,0 - 7,0	Slightly yellowish	Translucent	Water dispersible	20 – 35°C at the end of the process

NS

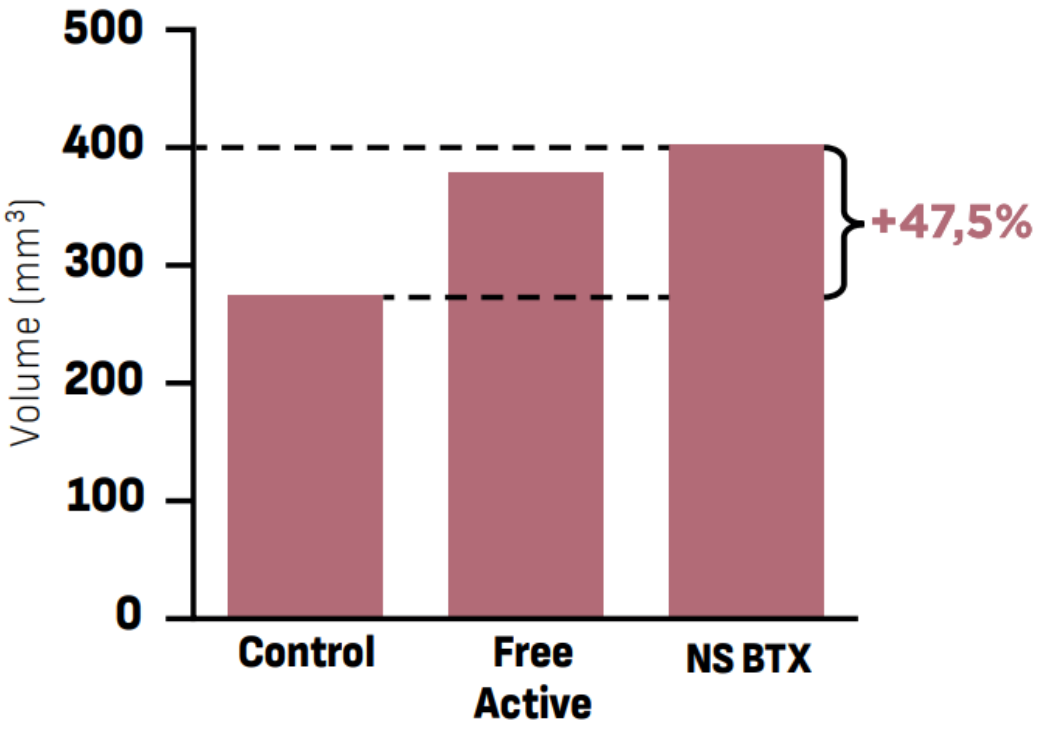
BTX

BTX

Composition:

TRIPEPTIDE

REDUCTION OF MUSCLE CELL CONTRACTILITY



NS

RENEW

Rw

Composition:

NIACINAMIDE AND PAPAIN

Stimulation of **cellular energy**.

Protection of the **skin barrier**.

Stimulation of **cellular metabolism**.

Stimulation of **ceramide synthesis**.

The multiple formulation allows Niacinamide to act in reducing oxidative stress, strengthening the skin barrier, and evening out skin tone, while Papain provides enzymatic renewal, promoting gentle exfoliation and stimulating the regeneration of the *stratum corneum*. Dual encapsulation ensures high stability and bioavailability of the actives, protecting them from degradation and enabling controlled and effective release.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Liposome	Serums, lotions, creams, and aqueous or O/W emulsion-type cosmetic products.	1 to 6%	Oily excipients with a chemical structure of aromatic rings.	Enzymatic (slow release)	4,0 - 8,0	Slightly yellowish.	Translucent	Water dispersible	20 – 35°C at the end of the process

NS

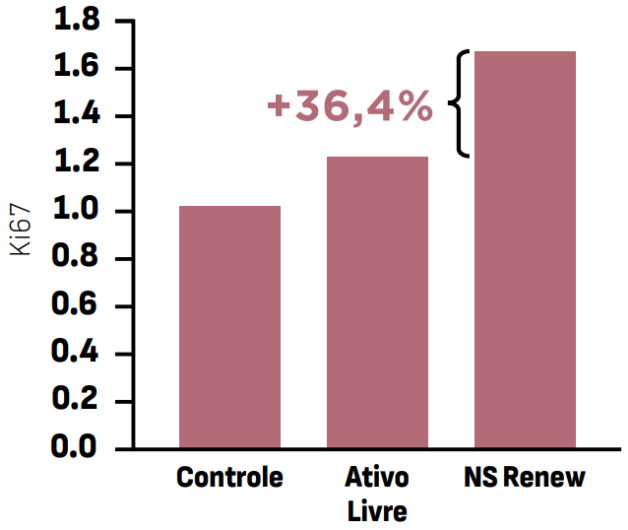
RENEW

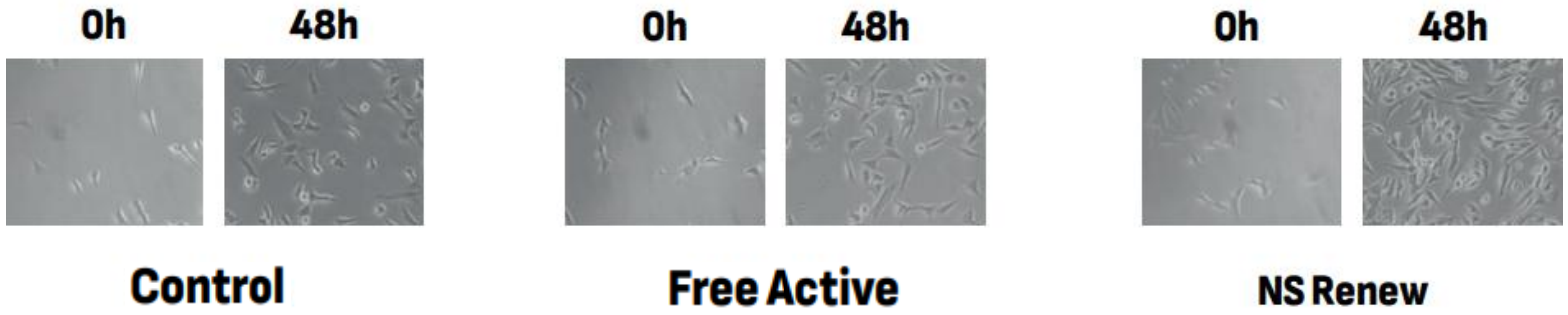
Rw

Composition:

NIACINAMIDE AND PAPAIN

STIMULUS TO CELLULAR RENEWAL





The solutions containing the control groups and samples were applied to the surface of the skin model every 2 days for 7 consecutive days, after which the procedure for extracting messenger RNA was performed. The experiments were conducted in triplicate for each group.

NS

ENERGIZE

En

Composition:

LIPOIC ACID AND COENZYME Q10

NS Energize is a nanostructured combination designed to revitalise the skin by stimulating cellular energy. Through deep and controlled release, it enhances antioxidant action, promotes collagen and elastin synthesis, improves firmness and radiance, and reduces sagging. The ingredient also provides protection against photoageing thanks to coenzyme Q10's ability to absorb UV radiation.

- **Protection** against the **oxidative effects of UV radiation**.
- **Stimulation** of **collagen** and **elastin synthesis**.
- **Anti-inflammatory** properties.
- **Stimulation** of **cellular energy**.
- **Soothing effect** on the skin.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W emulsion-type cosmetic products.	2 to 10%	Oily excipients with a chemical structure of aromatic rings.	Enzymatic (slow release)	4,0 - 8,0	Slightly yellowish.	Milky	Water dispersible	20 – 35°C at the end of the process

NS

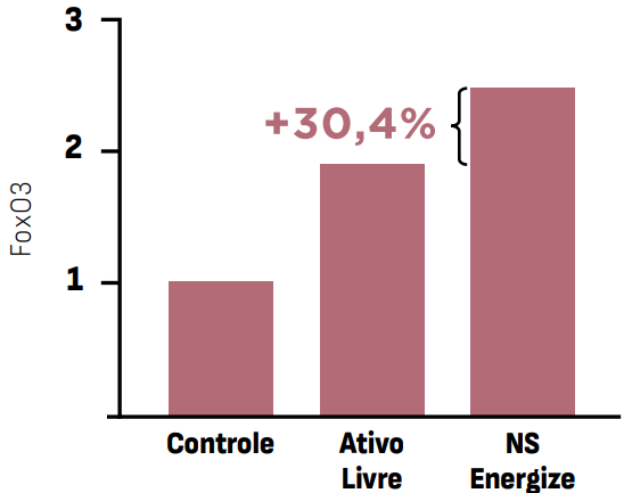
ENERGIZE

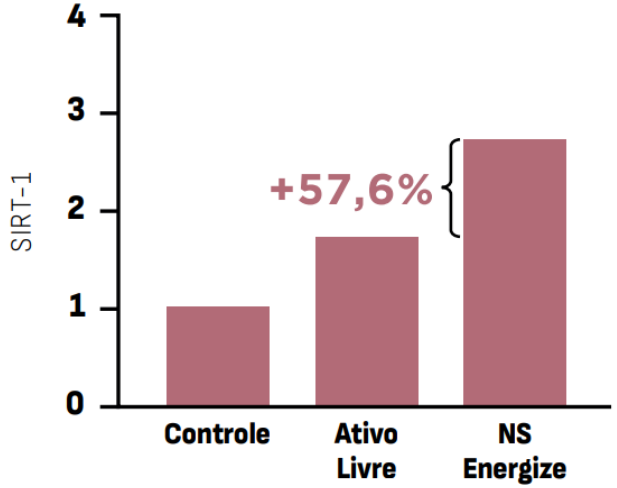
En

Composition:

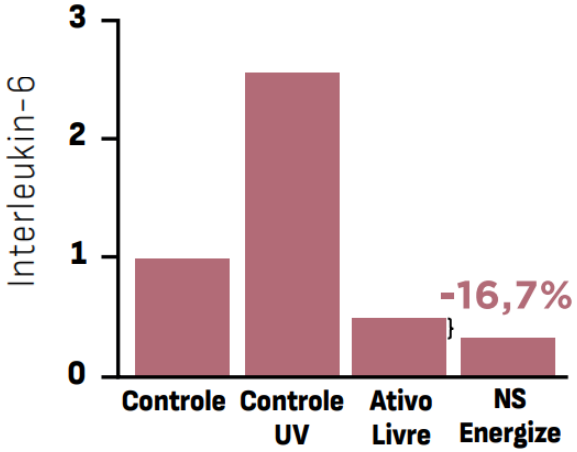
LIPOIC ACID AND COENZYME Q10

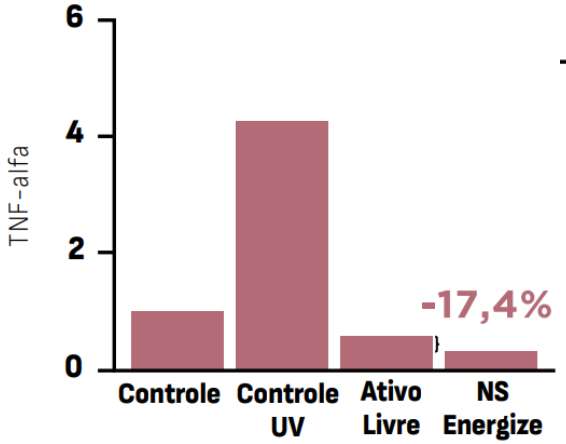
PROTECTION AGAINST THE EFFECTS OF PHOTOAGING



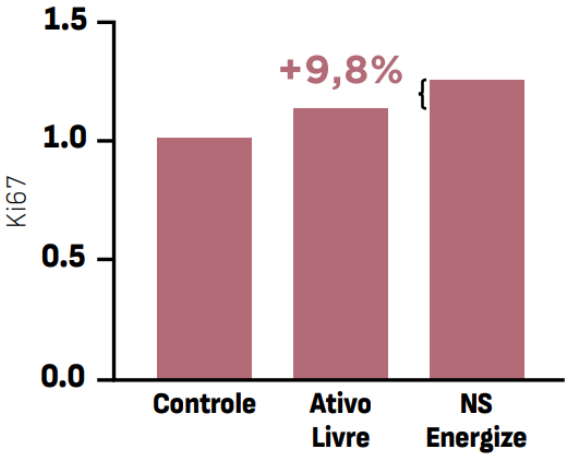


DERMOCALMING EFFECT



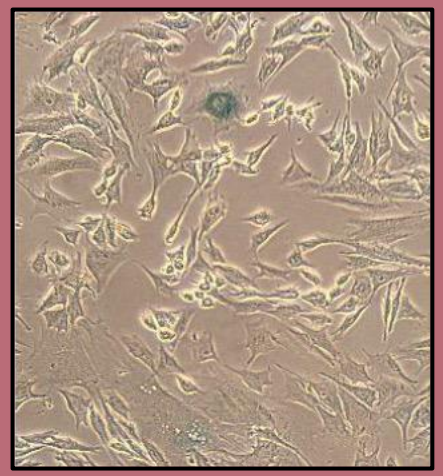


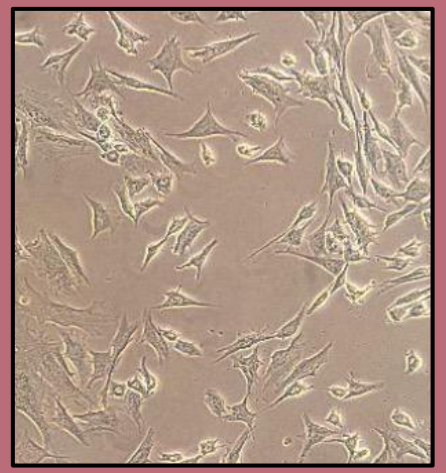
STIMULUS TO CELLULAR RENEWAL



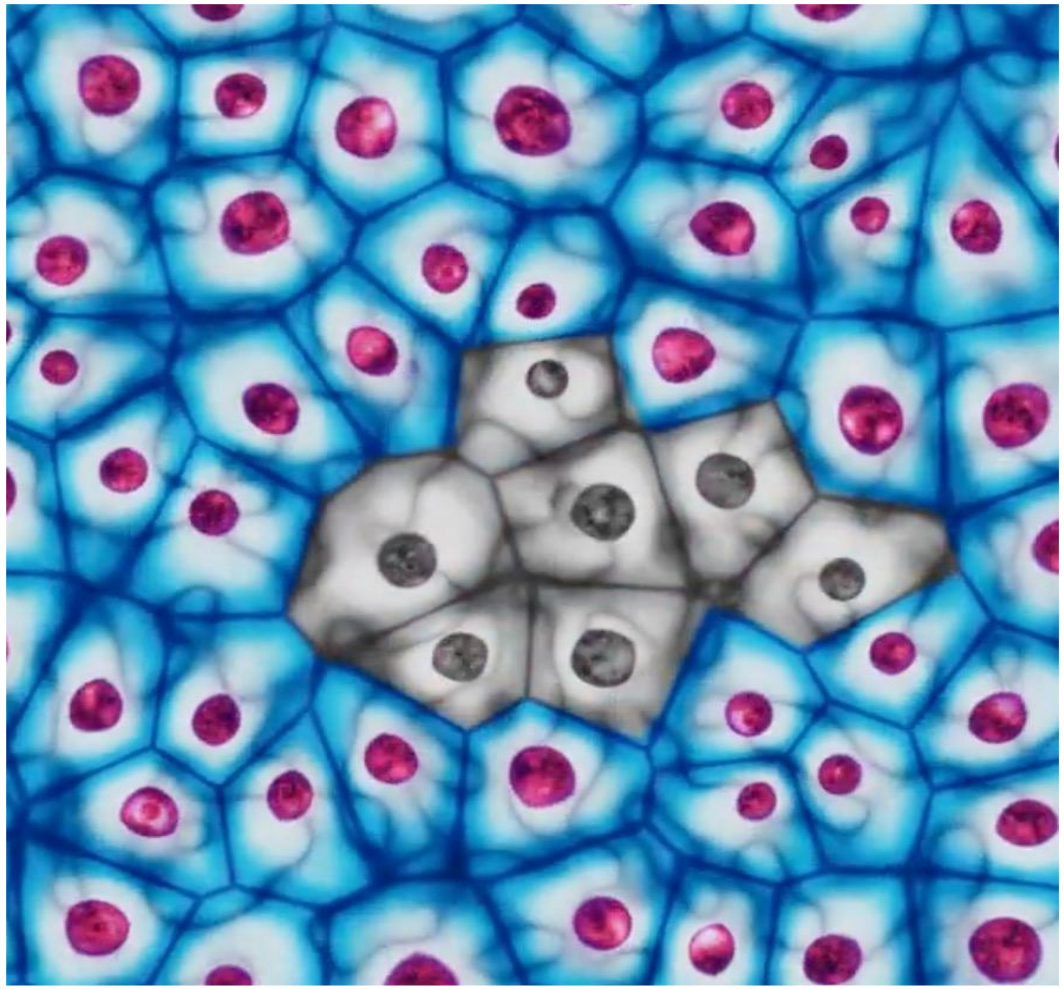
WHAT ARE **SENESCENT CELLS**?

Senescent cells are cells that have undergone significant DNA damage, mitochondrial dysfunction, and telomere shortening due to numerous cell divisions, resulting in an inability to continue dividing. In senescence, the cell is not eliminated and remains metabolically active, developing a secretory phenotype composed of pro-inflammatory cytokines and extracellular matrix–degrading enzymes.





Representative images of cellular senescence were obtained using beta-galactosidase. A 78.7% reduction in senescent cells was observed in the study conducted.



bettech

NS

SENEÍNA

Se

Composition:
OLEUROPEIN, QUERCETIN AND FISETIN

Seneína combines cutting-edge nanotechnology with powerful phenolic actives — oleuropein, quercetin, and fisetin. These compounds work synergistically to reverse the effects of cellular senescence. While oleuropein protects against oxidative damage, quercetin and fisetin eliminate senescent cells (senolytic action) and interrupt inflammatory processes (senomorphic action). Bettech's encapsulation technology ensures that the actives penetrate deeply into the dermis, promoting visibly younger, firmer, and healthier skin.

Reduction of **Cellular Senescence**.

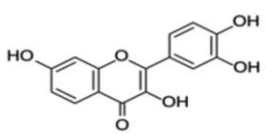
Anti-ageing action.

Antioxidant and **anti-inflammatory** properties.

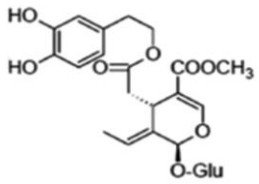
Senolytic and **Senomorphic** activity.

Skin protection and **rejuvenation**.

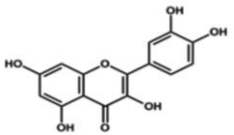
SENOLÍTICO
Fisetina



SENOMÓRFICO
Oleuroperin



SENOLÍTICO
Quercetina



TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	SIZE D50	PH	COLOR	APPEARANCE	SOLUBILITY
Lipidemic polymetric	Serums, lotions, creams, and aqueous or O/W emulsion-type cosmetic products.	1 to 3%	Products with high levels of surfactants and/or lipids.	Enzymatic (slow release)	130-600	3,0 - 7,0	Greenish yellow	Milky	Water dispersible

NS

HYDRAGLOW

Hy

NEW!

Composition:

HYALURONIC ACID

Hyaluronic acid is a natural polymer with a high capacity for water retention, essential for the support and hydration of the skin. With ageing, its production decreases, contributing to the appearance of wrinkles and fine lines. Although topical application has limited effects due to its high hydrophilicity and molecular size, its replenishment helps improve the skin's appearance and hydration.

Increase in **skin hydration**.

Anti-wrinkle action.

Filling effect on the skin.

NS

CERAMIDE

CE

Composition:

CERAMIDES TYPE 3/NP

NEW!

NS Ceramide is an advanced nanotechnological solution for restoring the skin barrier. Incorporating ceramides into nanocarriers provides benefits superior to conventional systems, such as protection against degradation, enhanced permeation into the skin's stratum corneum, and gradual delivery of the active ingredient.

- **Strengthens** the **skin barrier**.
- Supports the **recovery** of **sensitised skin**.
- **Stimulates** the **synthesis of filaggrin** and **involucrin**.
- Provides a **dermocalming effect on reactive skin**.
- **Reduces** the expression of **inflammatory cytokines**.
- **Modulates** the **cutaneous inflammatory response**.

TECNOLOGY	APPLICATION	SUGGESTED USAGE %	INCOMPATI-BILITIES	RELEASE MECHANISM	PH	SIZE D50	COLOR	APPEARANCE	SOLUBILITY
Lipidic Polymeric	Serums, lotions, creams, and aqueous cosmetic products or O/W type emulsions.	1 - 10%	Products with high surfactant and/or lipid content	Enzymatic (slow release)	3,0 - 7,0	130-600	White to slightly yellowish	Milky	Dispersible in water

NS

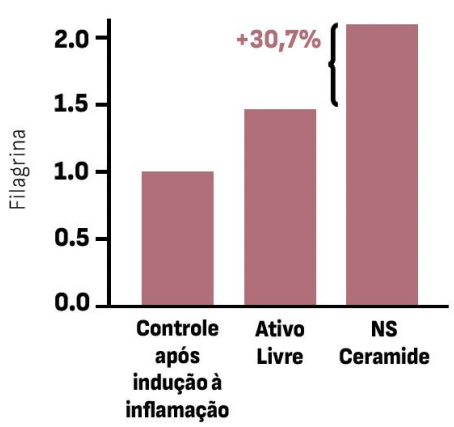
CERAMIDE

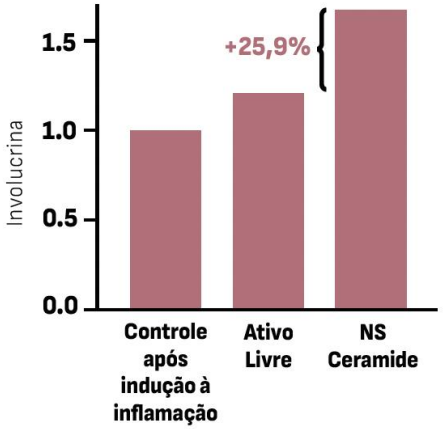
CE

Composition:

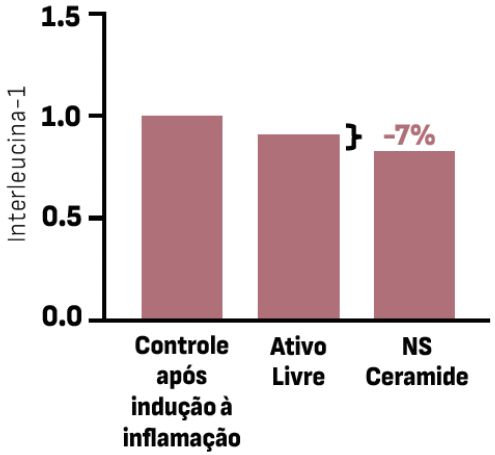
CERAMIDES TYPE 3/NP

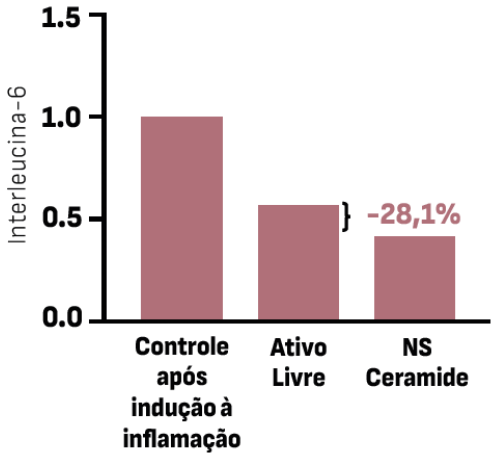
SKIN BARRIER PROTECTION

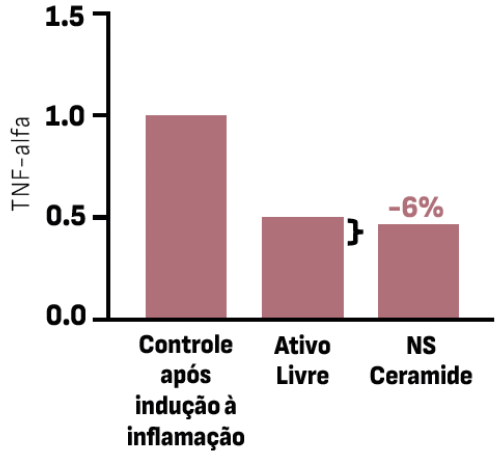




DERMO-SOOTHING EFFECT







NS

PHYTO CERAMIDE

PhC

Composition:
PHYTOCERAMIDES

NS Phyto Ceramide is a plant-derived cosmetic ingredient that acts multifunctionally on the skin. Ceramides strengthen the skin barrier, control transepidermal water loss, protect against external aggressors, and contribute to hydration, pH regulation, inflammation control, and improved skin appearance. Topical use of plant-derived phytoceramides, compatible with endogenous ceramides, helps restore barrier function. It is indicated for intense hydration, barrier recovery, soothing action, and care of sensitive, reactive, or ageing skin.

- **Strengthens** the **skin barrier**.
- **Stimulates** the **synthesis of filaggrin** and **involucrin**.
- **Reduces** the **expression of inflammatory cytokines**.
- Supports the **recovery** of **sensitised skin**.
- Provides a **dermocalming effect on reactive skin**.
- **Modulates** the **cutaneous inflammatory response**.

TECNOLOGY	APPLICATION	SUGGESTED USAGE %	INCOMPATI-BILITIES	RELEASE MECHANISM	PH	SIZE D50	COLOR	APPEARANCE	SOLUBILITY
Liposome	Serums, lotions, creams, and aqueous cosmetic products or O/W type emulsions.	1 to 6%	Products with high surfactant content, as well as W/O emulsions.	Enzymatic (slow release)	2,0 - 7,0	130-600	Slightly yellowish	Translucent	Dispersible in water

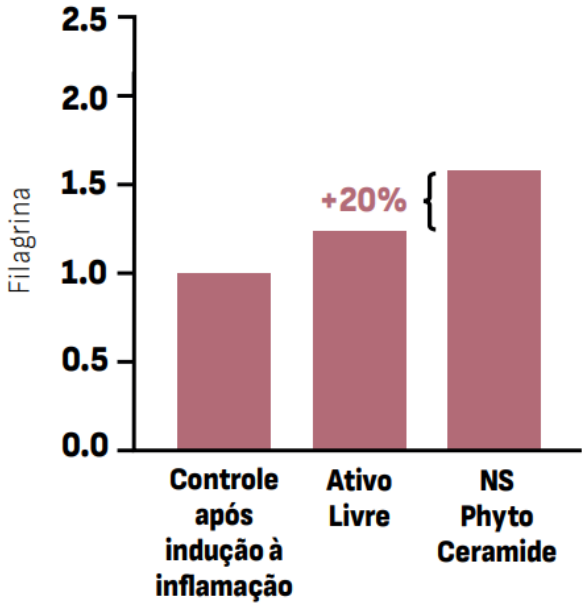
NS

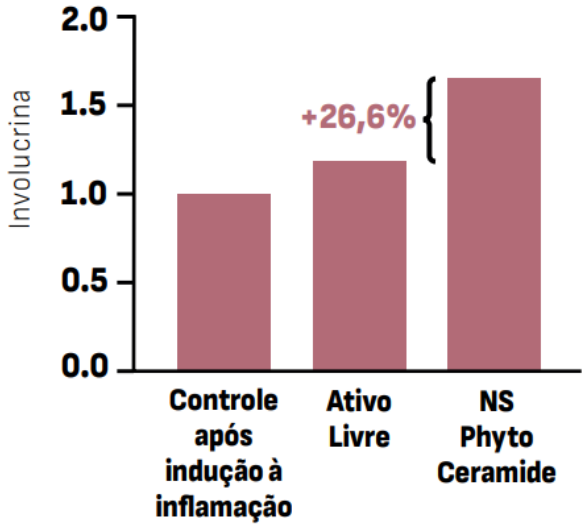
PHYTO CERAMIDE

PhC

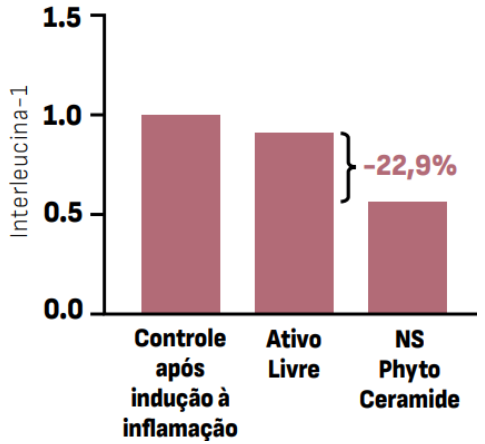
Composition:
PHYTOCERAMIDES

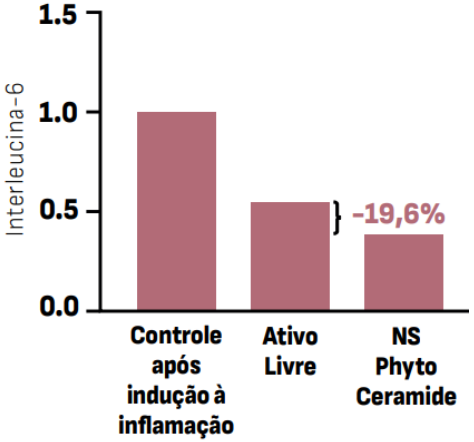
SKIN BARRIER PROTECTION

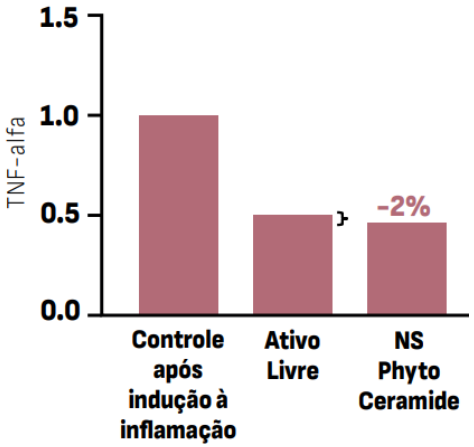




DERMO-SOOTHING EFFECT







NS

ICARIDINA

Ic

Composition:

ICARIDIN

NEW!

The compound is considered one of the safest due to its low toxicity and the long-lasting protection it provides as an insect repellent. It is particularly effective thanks to the expansion of its area of effect, acting against mosquitoes that transmit diseases, such as *Aedes aegypti* (yellow fever vector). Additionally, it is hypoallergenic and non-oily, minimising discomfort during continuous use.

Broad-spectrum repellent active encapsulated in **polymeric nanoparticles**.

Controlled-release technology **ensures long-lasting protection**.

Proven 8-hour efficacy and clinical testing against *Aedes aegypti*, *Culex quinquefasciatus*, and *Anopheles aquasalis*.

Optimises the active ingredient's **bioavailability** on the skin surface **without increasing dermal permeation**.

	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	SIZE D50	PH	COLOR	APPEARANCE	SOLUBILITY
Nanoemulsion	Repellents	25%	Non-aqueous media	Not applicable	300-1200	4,5 - 8,0	White	Paste-like	Water dispersible

NS

ICARIDINA

Ic

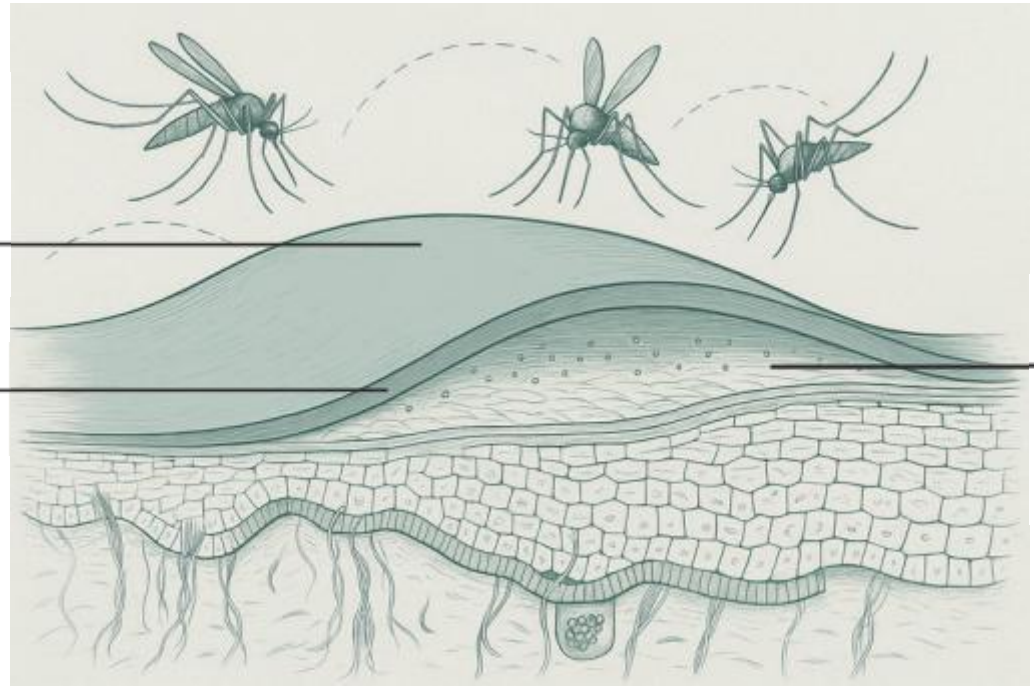
Composition:

ICARIDIN

PROTECTION MECHANISM

Extended protection time.

Controlled release.



Reduces permeation of the active ingredient into the dermis.

NS

ICARIDINA

Ic

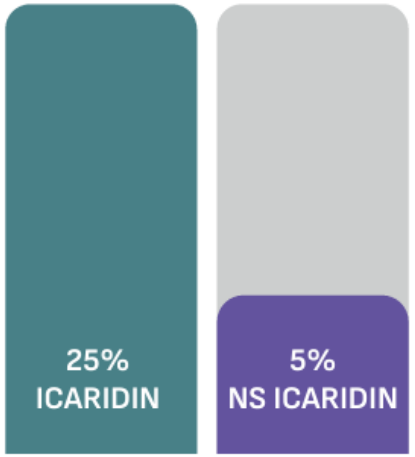
Composition:

ICARIDIN

***IN VIVO* TESTS**

The tests were conducted with **X volunteers**.

		1h	2h	3h	4h	5h	6h	7h	8h	Exposição 30s
Aedes aegypti	LANDING	0	0	0	0	0	0	0	8	20
	BITE	0	0	0	0	0	0	0	6	11
Culex quinquefasciatus	LANDING	0	0	0	0	0	0	0	9	20
	BITE	0	0	0	0	0	0	0	6	11
Anopheles aquasalis	LANDING	0	0	0	0	0	0	0	10	20
	BITE	0	0	0	0	0	0	0	6	11



8 HOURS
of protection using only 5% free icaridin (25% NS Icaridin)

The assays were conducted in accordance with the EPA guidelines (OPPTS 810.3700) and ANVISA requirements (RDC No. 19/2013). Voluntary participants had their forearms treated with the standard product dose and were exposed, at regular intervals, to cages containing female *Aedes aegypti*, *Culex quinquefasciatus*, and *Anopheles aquasalis*. The number of landings and bites was monitored until loss of effect was confirmed. The product demonstrated 100% repellent efficacy for 8 hours against all tested species.

NS

CLEARDRUFF

CD

NEW!

Composition:

PIROCTONE OLAMINE, CYCLOPIROX OLAMINE, SALICYLIC ACID, AND BISABOLOL

NS Cleardruff uses transfersome technology to deliver four complementary actives into the deeper layers of the scalp. This targeted release enhances antifungal, keratolytic, and anti-inflammatory effects while minimising irritation. The formulation provides superior dandruff control, increased scalp comfort, and long-lasting results.

- Helps **reduce** and **control dandruff** and **scalp flaking**.
- Visibly **reduces dandruff** in up to **14 days**.
- **100% of participants** showed a **reduction in dandruff intensity**.
- **Reduces dandruff intensity by up to 59.2%.**

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	SIZE D50	COLOR	APPEARANCE	SOLUBILITY
Transfersome	Hair Treatment	2% - 5%	Non-aqueous media	Enzymatic	6 - 9	150-500	Slightly yellow – Yellow	Milky	Water dispersible

NS

CLEARDRUFF

CD

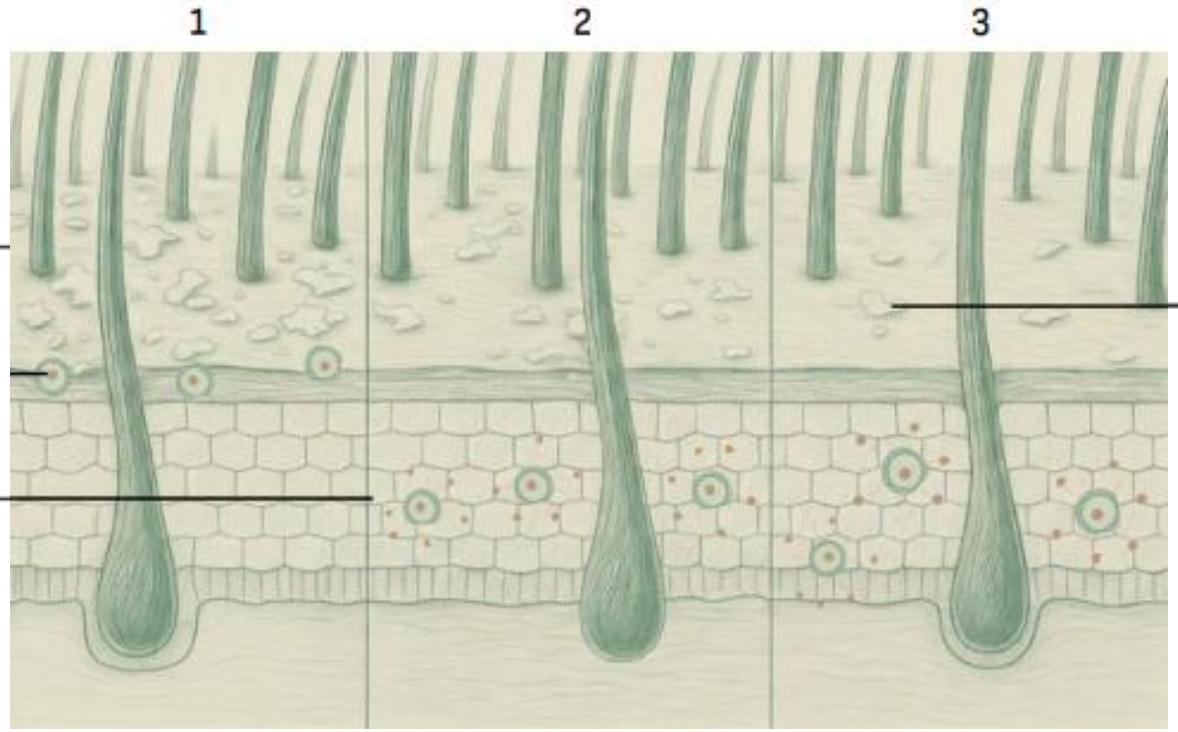
Composition:

PIROCTONE OLAMINE, CYCLOPIROX OLAMINE, SALICYLIC ACID, AND BISABOLOL

ACTION MECHANISM

Reduction in dandruff quantity.

Prolonged release of actives.



More efficient permeation.

NS

CLEARDRUFF

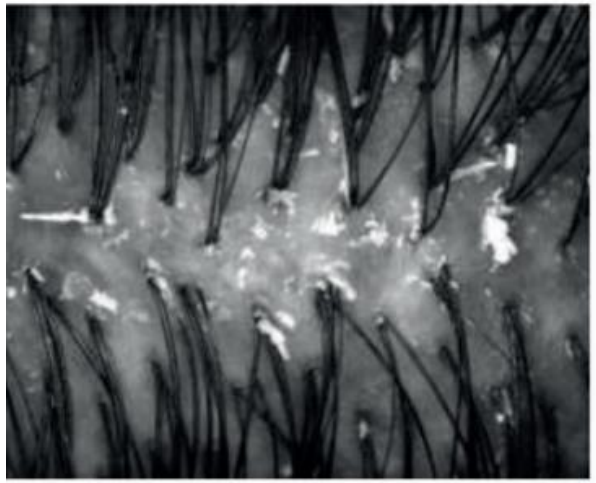
CD

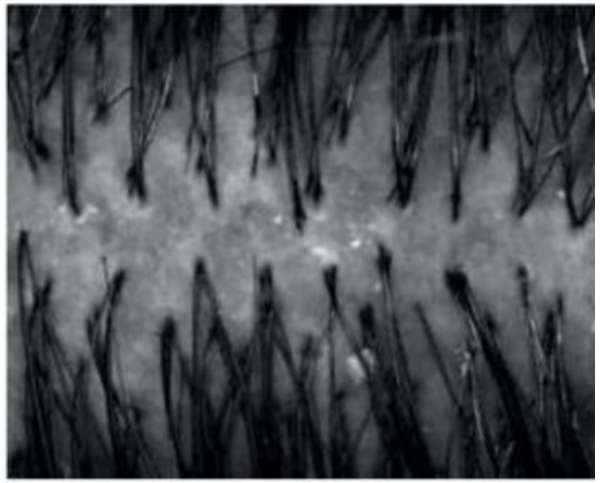
Composition:

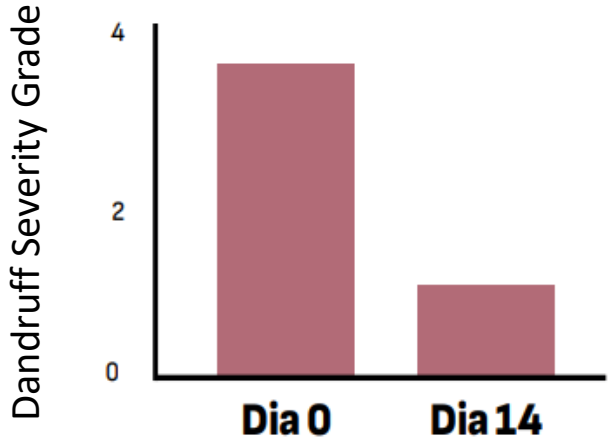
PIROCTONE OLAMINE, CYCLOPIROX OLAMINE, SALICYLIC ACID, AND BISABOLOL

***IN VIVO* TESTS**

The tests were conducted with **X volunteers**.







The study was planned and conducted in accordance with the provisions of Resolution 466/12 of the National Health Council, regarding Guidelines and Regulatory Standards for Research Involving Human Subjects.

During participant recruitment, volunteers were instructed to suspend the use of any topical, cosmetic, or dermatological products applied to the scalp and hair 48 hours prior to the start of the study. On the study day, recruited participants who attended the laboratory were informed by the researcher about the study procedures, ethical and legal aspects, risks and benefits, medical support, reimbursement of participation costs, and were asked to sign the informed consent form (ICF) in two copies. The methodology consisted of a subjective analysis of clinical efficacy, conducted by a trained evaluator at the beginning of the study and after 14 days of home use of the investigational product.

Dados médios		% melhora	% participantes que apresentam melhora
Inicial	Após 14 dias		
3,5	1,4	59,2	100

NS

HYDRAFIBER

NFi

NEW!

Composition:

CYSTEINE, COCONUT OIL, MACADAMIA OIL, AND MANGO BUTTER

Maintains **hair hydration** for **24 hours**.

Stronger hair.

Restores the **hair's hydration level**.

Increased hair fiber elasticity.

NS Hydrafiber uses transfersome technology to deliver nourishing and strengthening actives into the hair fiber. Plant-derived lipids restore softness, shine, and protection, while functional cysteine and keratin-binding complexes reinforce structure and elasticity. This targeted delivery results in stronger, healthier, and more resilient hair with long-lasting hydration.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	SIZE D50	COLOR	APPEARANCE	SOLUBILITY
Transfersome	Hair Treatment	2% - 8%	Non-aqueous media	Gradual diffusion	5 - 7	100-500	Transparent – slightly yellow	Translucent	Water dispersible

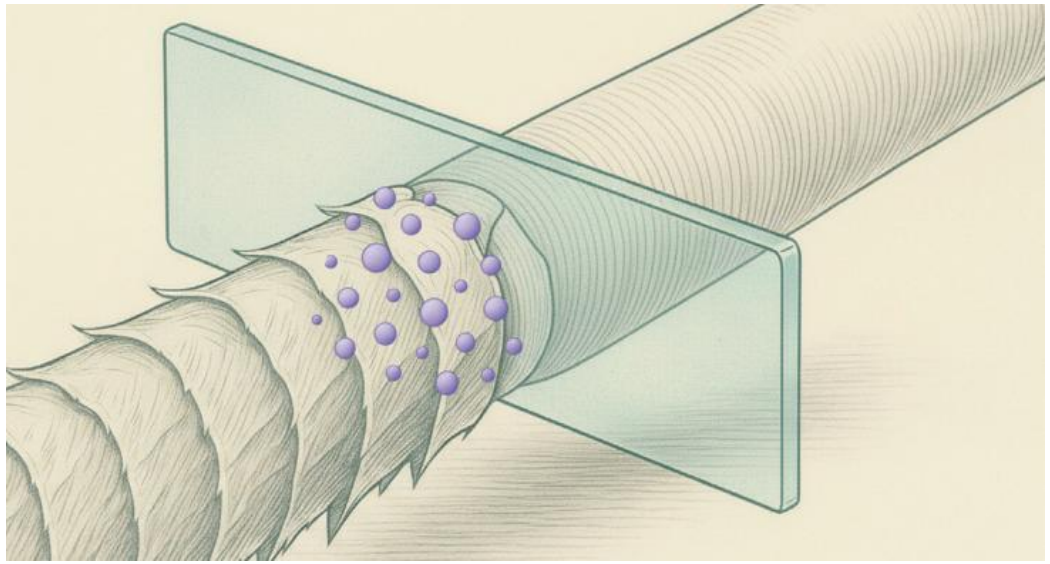
NS

HYDRAFIBER

NFi

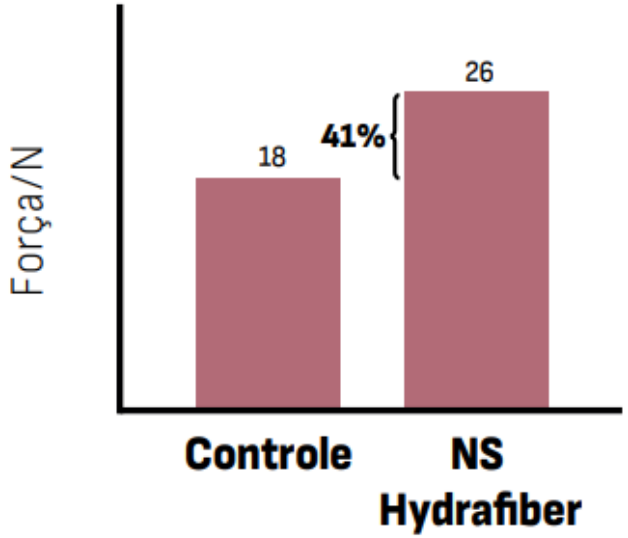
Composition:

CYSTEINE, COCONUT OIL, MACADAMIA OIL, AND MANGO BUTTER

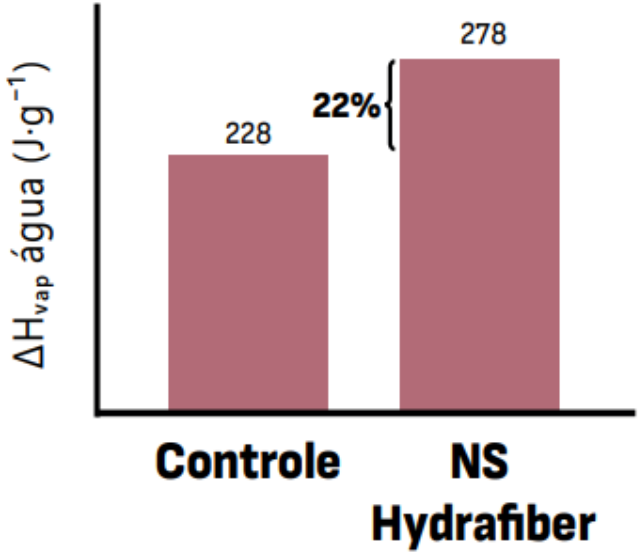


Ultra-deformable vesicles that penetrate the interior of the hair fiber for deep treatment and revitalisation of the strands.

HAIR STRENGTHENING



HAIR HYDRATION



NS

OLIVE
UPCYCLING

Ov

Composition:

OLIVE EXTRACT

NS Olive Upcycling, by Bettech, makes use of olive pomace, which is rich in antioxidants that fight free radicals and protect against oxidative stress and ageing. Its anti-inflammatory properties reduce interleukin-6 and TNF-α, promoting a soothing effect. Through nanotechnology, it enhances the permeation of bioactive compounds by means of a biocompatible platform. NS Olive Upcycling combines nature and science for healthy and radiant skin.

Protection against the **oxidative effects of UV radiation**.

Protection against the **effects of photoageing**.

Increase in the skin's **antioxidant effect**.

Soothing effect on the skin.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 3%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	4,0 - 8,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

NS

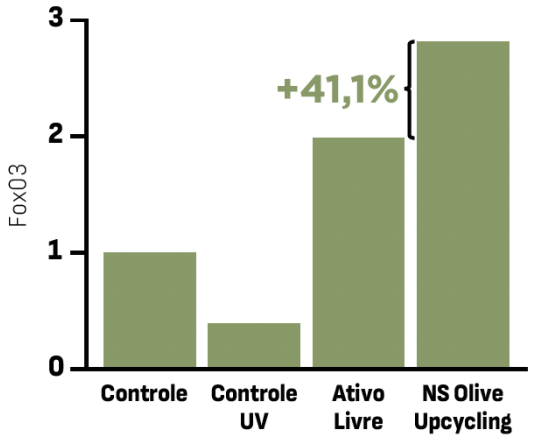
OLIVE
UPCYCLING

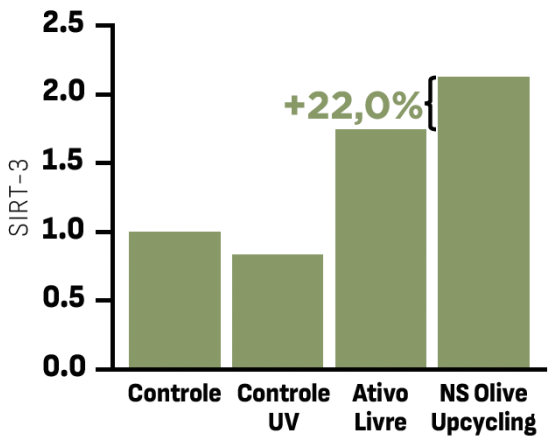
Ov

Composition:

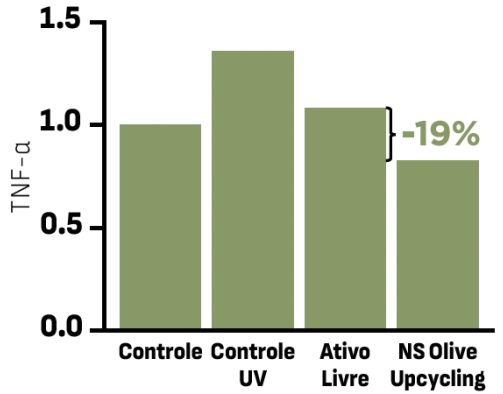
OLIVE EXTRACT

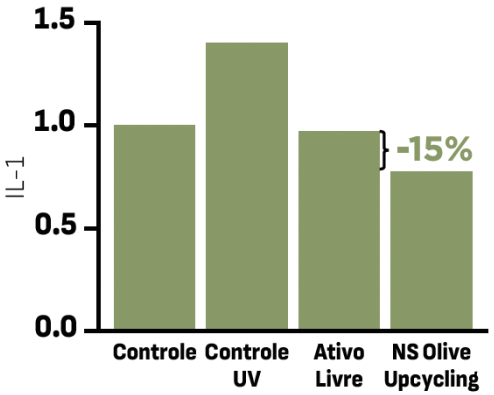
PROTECTION AGAINST PHOTOAGING





DERMOCALMING EFFECT





NS

ASTAXANTHIN

Ax

Composition:

ASTAXANTHIN

Astaxanthin is a natural carotenoid known for its multiple skin health benefits, including antioxidant and anti-inflammatory actions, reduction of hyperpigmentation, and prevention of photoageing with decreased wrinkle formation. However, its cosmetic application is limited due to its low water solubility and chemical instability. Formulation through encapsulation in nanocarriers enables the effective delivery of astaxanthin to the deeper layers of the skin, making it an innovative solution to protect and revitalise the skin.

- **Protection** against the **oxidative effects of UV radiation**.
- **Reduction** of **cellular senescence**.
- **Skin firmness** through **collagen stimulation**.
- **Protection** against the **degradation of the extracellular matrix**.
- **Anti-inflammatory** properties.
- **Stimulation** of **cellular energy**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPA-TIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUC-TURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 3%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	4,0 - 8,0	Orange	Milky	Water dispersible	20 – 35°C at the end of the process

NS

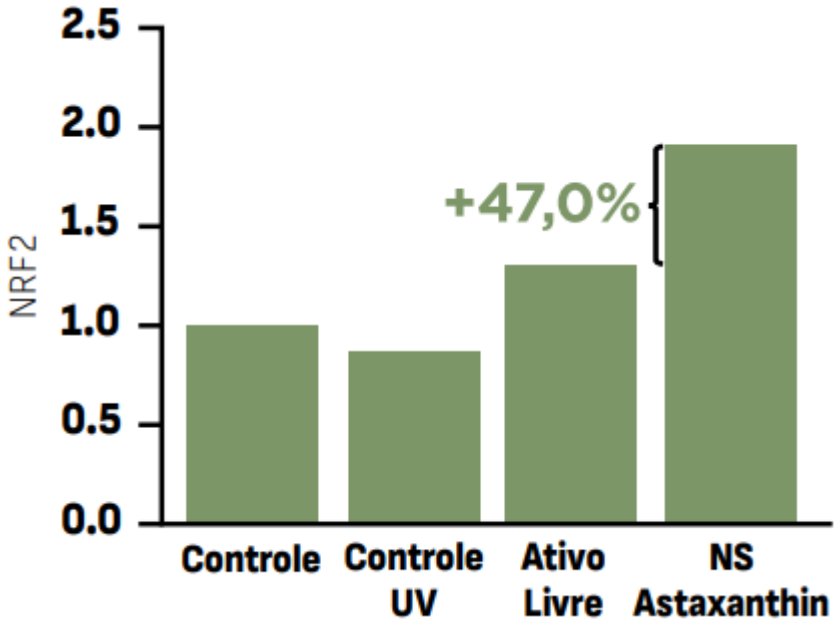
ASTAXANTHIN

Ax

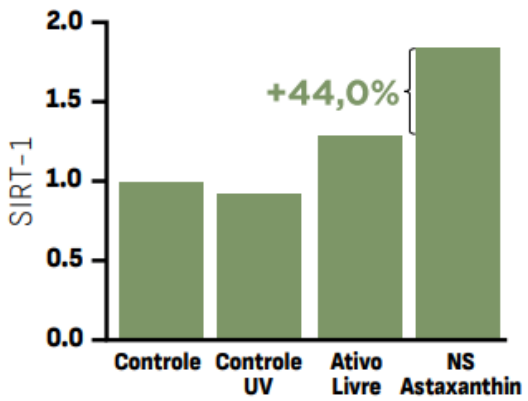
Composition:

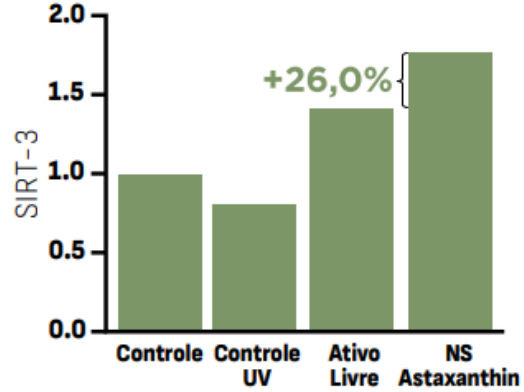
ASTAXANTHIN

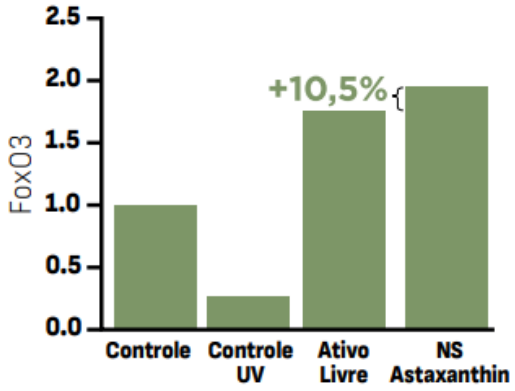
PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY UV RADIATION



PROTECTION AGAINST PHOTOAGING







NS

CHLORELLA

Ch

Composition:

Chlorella sp.

NS Chlorella is the nanostructured form of *Chlorella sp.* extracts, a microalga rich in bioactive compounds with antioxidant, anti-inflammatory, and antipollution actions. Encapsulated in reduced particles, Chlorella reaches the deeper layers of the skin, delivering its bioactive compounds effectively and safely. The result is healthier, revitalised skin protected against environmental damage, with minimal risk of irritation.

Protection against the **oxidative effects of UV radiation**.

Detox effect.

Stimulation of elastin **synthesis**.

Antipollution effect.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 3%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	5,0 - 9,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

NS

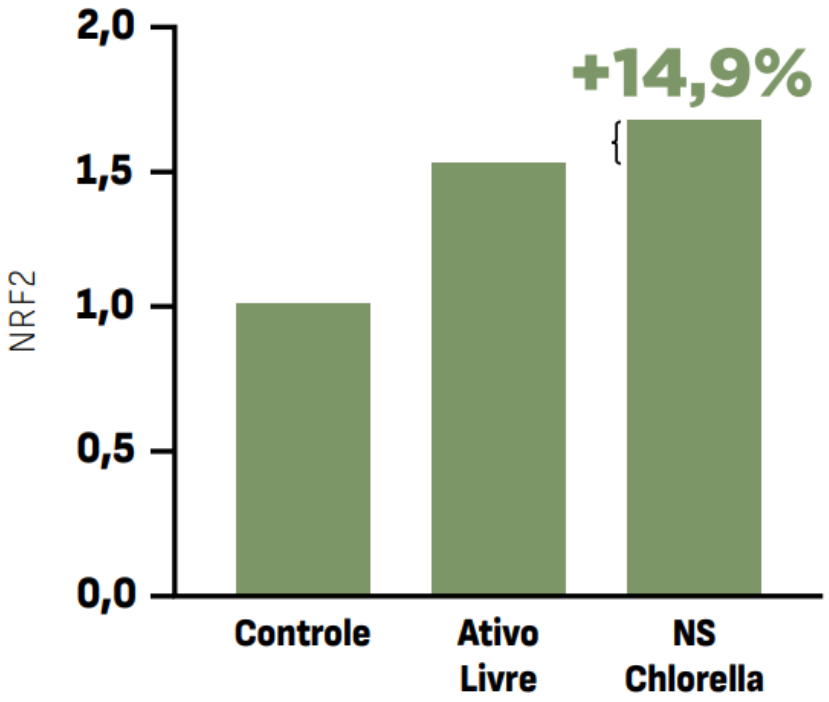
CHLORELLA

Ch

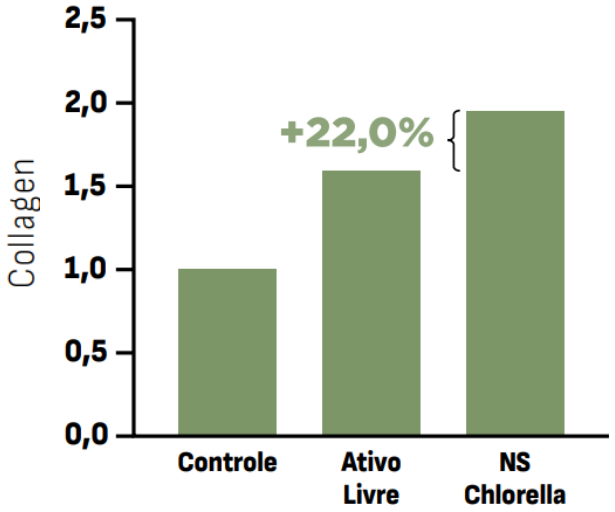
Composition:

Chlorella sp.

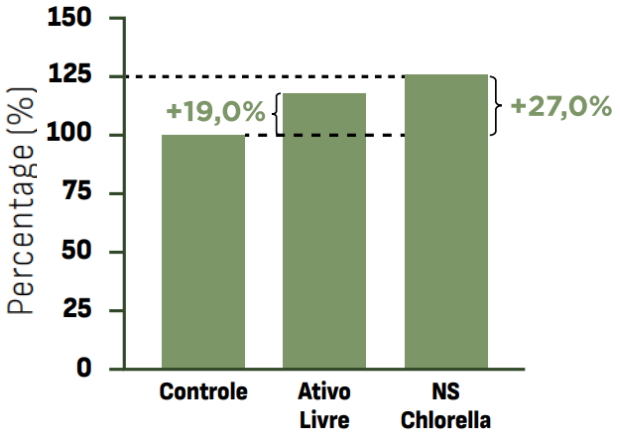
PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY UV RADIATION



SKIN FIRMNESS



ANTI-POLLUTION EFFECT



NS

PHYCO

Py

Composition:
RED ALGAE EXTRACT

NS Phyco is the nanostructured form of phycoerythrin, a water-soluble phycobiliprotein with powerful antioxidant, anti-wrinkle, and anti-ageing properties. The nanostructure enables deep penetration, controlled release, and protection of the active ingredient, ensuring maximum efficacy with minimal risk of irritation. It is ideal for revitalised, radiant, and healthy skin, and also functions as a safe natural colourant in tinted cosmetics.

- **Protection** against the **oxidative effects of UV radiation**.
- **Strengthening** of the **skin barrier**.
- **Protection** against the **degradation of the extracellular matrix**.
- **Reduction** of **collagen** and **elastin degradation**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 3%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	4,5 - 9,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

NS

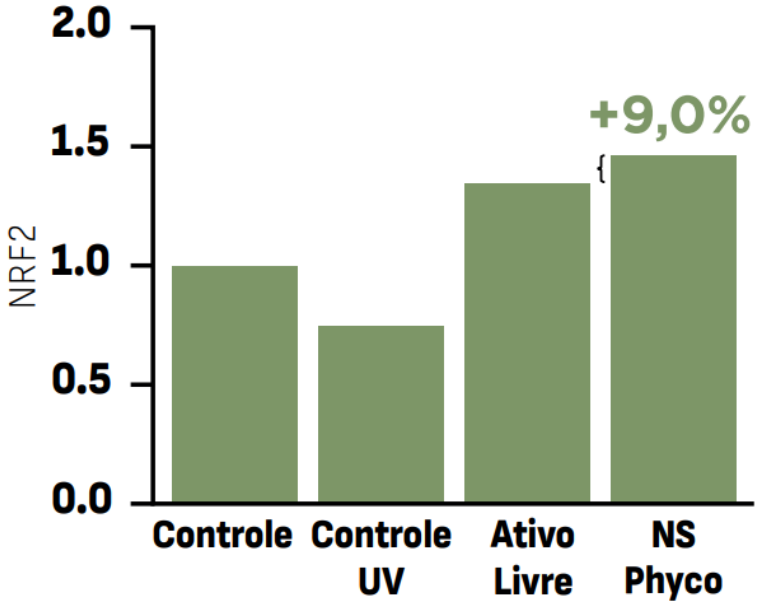
PHYCO

Py

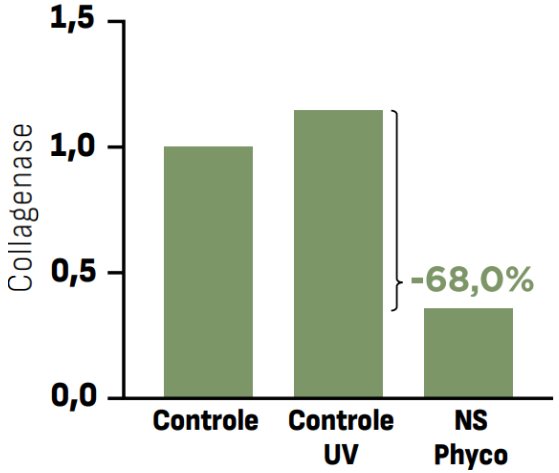
Composition:

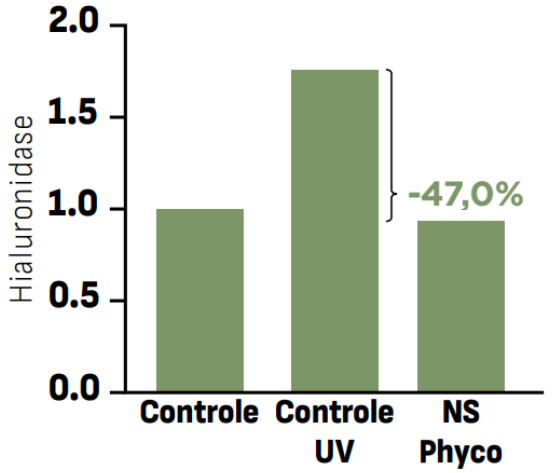
RED ALGAE EXTRACT

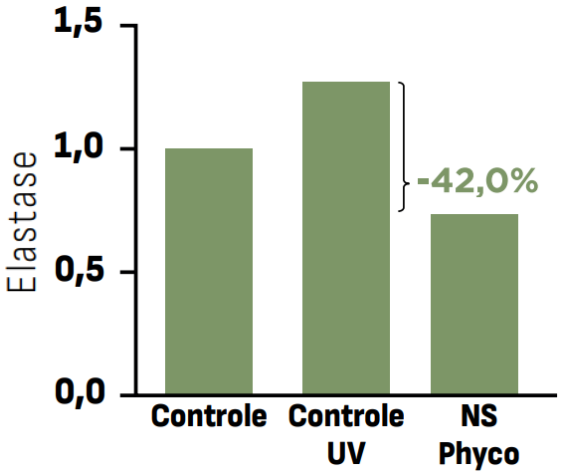
PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY UV RADIATION

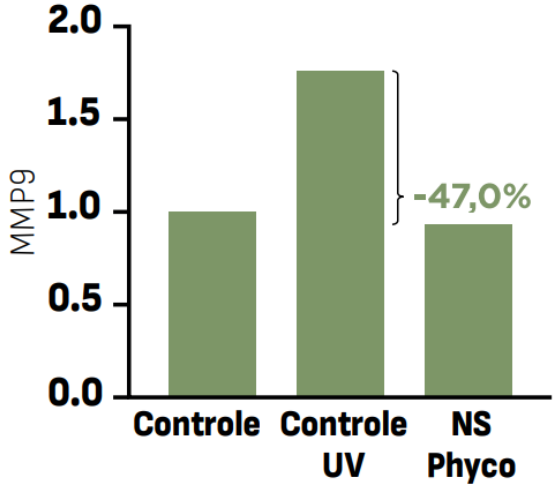


PROTECTION AGAINST EXTRACELLULAR MATRIX DEGRADATION









NS

QUERCETIN

Qe

Composition:

QUERCETIN

NS Quercetin is the nanostructured form of quercetin, which enhances its antioxidant and anti-inflammatory actions. The nanoparticle technology ensures controlled release, deep penetration, and incorporation into fibroblasts, stimulating collagen and elastin production, as well as improving firmness and elasticity. It also provides protection against free radicals and delivers an anti-ageing effect superior to that of free quercetin.

Increase in **proteins** related to **cellular energy**.

Skin firmness through **collagen stimulation**.

Increase in the skin's **antioxidant effect**.

Protection against the **degradation of the extracellular matrix**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	2 to 10%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	4,0 - 8,0	Slightly yellowish	Milky	Water dispersible	20 – 35°C at the end of the process

NS

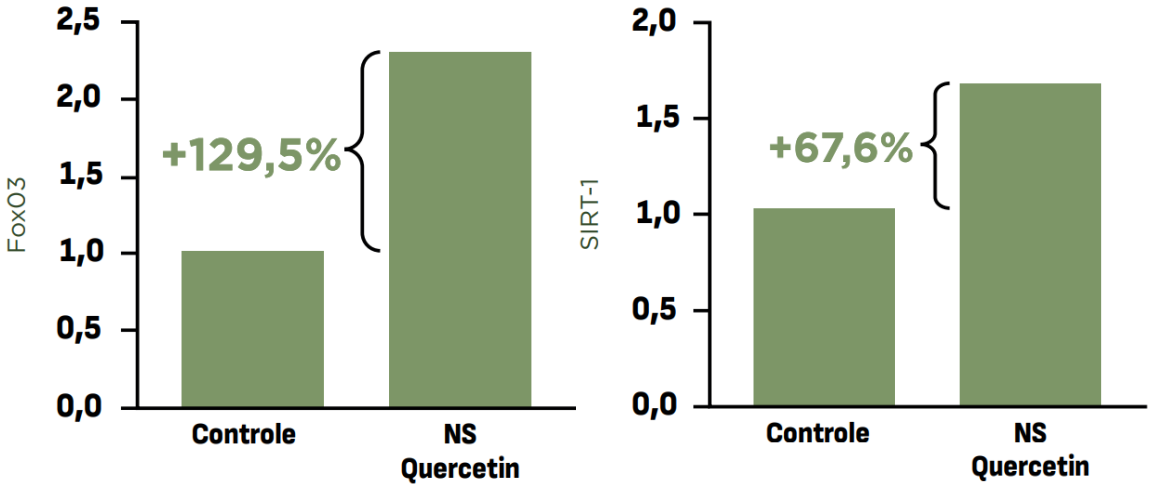
QUERCETIN

Qe

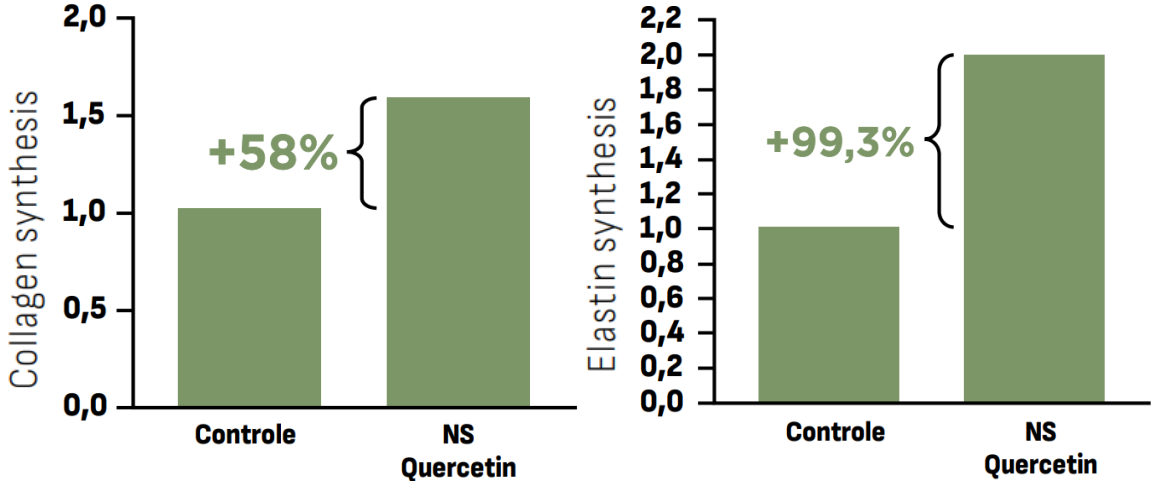
Composition:

QUERCETIN

PROTECTION AGAINST THE EFFECTS OF PHOTOAGING



SKIN FIRMNESS



CLASSIC

NS

ASCORBIC ACID

VC

Composition:
ASCORBIC ACID

NS Ascorbic Acid, also known as Vitamin C, is involved in anti-ageing skin processes, acting directly in the synthesis of collagen and elastin. In addition to being a potent antioxidant, it functions as a brightening agent in the treatment of hyperpigmentation, providing an excellent skin tone evening effect. NS Ascorbic Acid delivers greater efficacy compared to the active ingredient in its conventional form due to higher penetrability and protection against premature degradation and oxidation.

Protection against the oxidative effects of **UV radiation**.

Protection against the effects of **photoaging**.

Stimulation of **collagen** and **elastin synthesis**.

Reduction of **hyperpigmentation**.

Skin firmness through **collagen stimulation**.

Increase in **cellular longevity**.

TECNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Liposome	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 10%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	2,0 – 7,0	Whitish – Slightly yellowish	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

ASCORBIC ACID

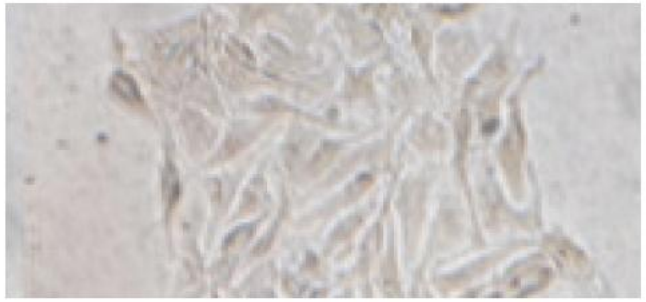
VC

Composition:

ASCORBIC ACID

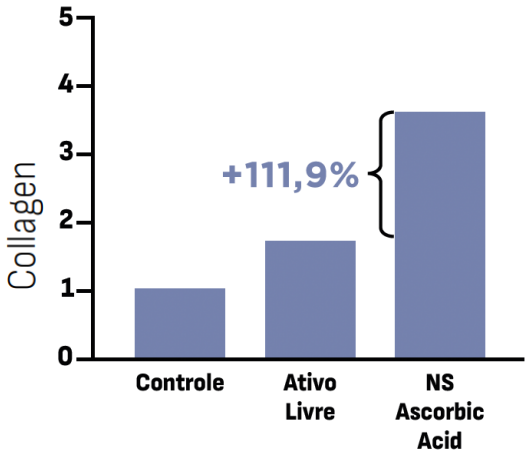
REDUCTION OF HYPERPIGMENTATION

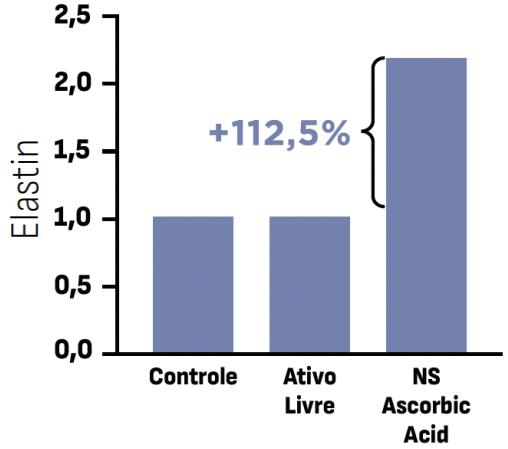
Control



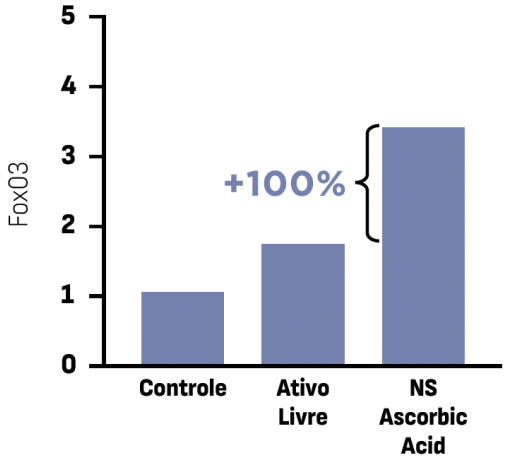
NS Ascorbic Acid

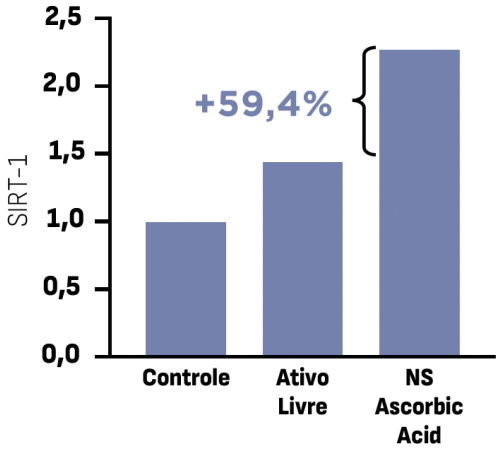
SKIN FIRMNESS





PROTECTION AGAINST THE EFFECTS OF PHOTOAGING





CLASSIC

NS

HYALURONIC ACID

HA

Composition:
HYALURONIC ACID

Increase in **skin hydration**.

Anti-wrinkle action.

Skin plumping effect.

NS Hyaluronic Acid is a prominent cosmetic active ingredient due to its exceptional hydrating properties, rejuvenating the skin by attracting water to the intercellular space. It improves skin firmness, combats sagging, reduces wrinkles, and provides anti-ageing benefits, leaving the skin softer and smoother from the surface to the deeper layers. As a nanoparticle, it ensures superior hydration, adhering to the skin during application and outperforming its conventional form.

TECNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nanoemulsion	Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products, and O/W emulsion-type products.	1 to 10%	Products with high surfactant content, as well as highly oily bases and bases with high salt concentration.	For skin adherence, during product application	4,0 – 7,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

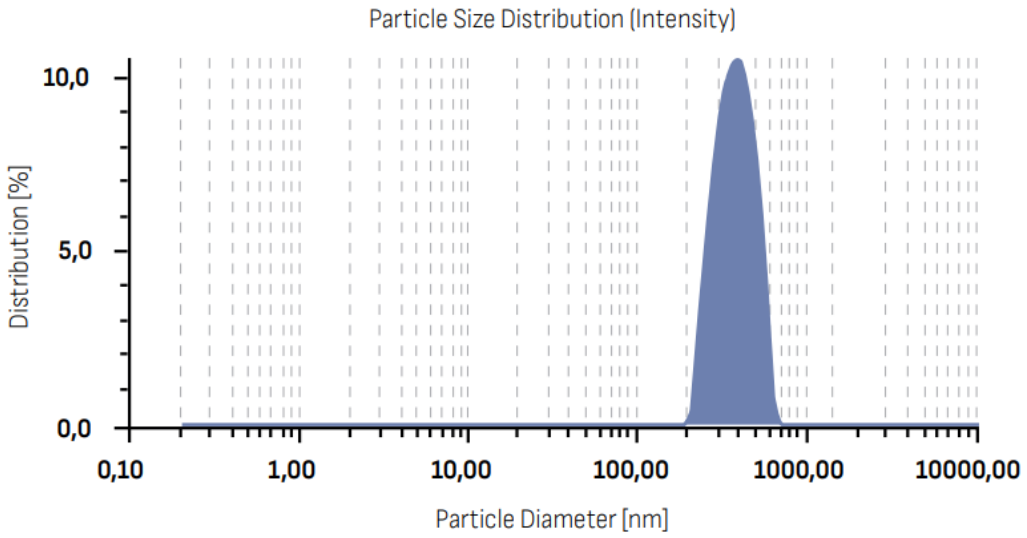
NS

HYALURONIC ACID

HA

Composition:
HYALURONIC ACID

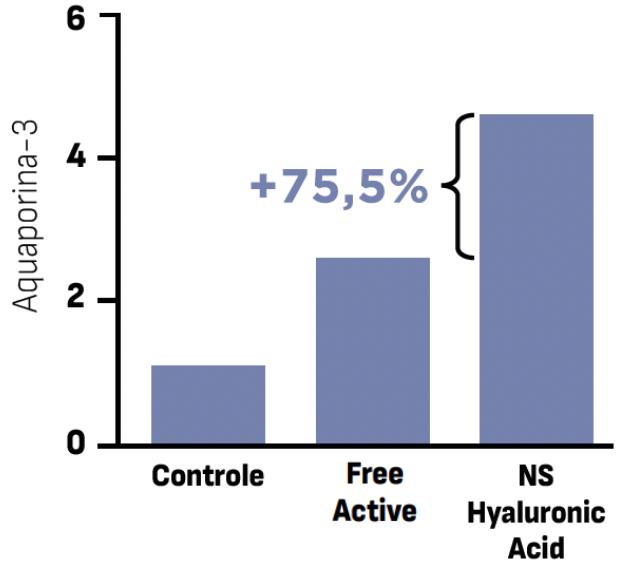
PHYSICOCHEMICAL PROPERTIES



Hydrodynamic Diameter D50: **200 - 600 nm**

Particle Analyzer: **Litesizer 500**

HYDRATION



The solutions containing the control groups and samples were applied to the surface of the skin model every 2 days for 14 consecutive days, and then the procedure for mRNA extraction was performed. The experiments were conducted in triplicate for each group.

CLASSIC

NS

SALICYLIC ACID

SA

Composition:
SALICYLIC ACID

NS Salicylic Acid effectively treats uneven skin by breaking down keratin, reducing scars and roughness, and improving collagen synthesis for firmer skin. It also regulates sebum and provides anti-inflammatory benefits, making it ideal for oily and acne-prone skin. The ingredient enhances this action with superior bioadhesion, ensuring deep and efficient penetration for targeted anti-inflammatory effects.

- **Reduction** of **oiliness**.
- **Stimulation** of **cell renewal**.
- **Anti-inflammatory** properties.
- **Reduction** of **hyperkeratinisation**.
- **Soothing effect** on the skin.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Emulsion	Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products, and O/W emulsions.	2 to 10%	Products with high surfactant content, as well as highly oily bases and bases with a high concentration of salts.	Enzymatic (slow release)	3,0 – 9,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

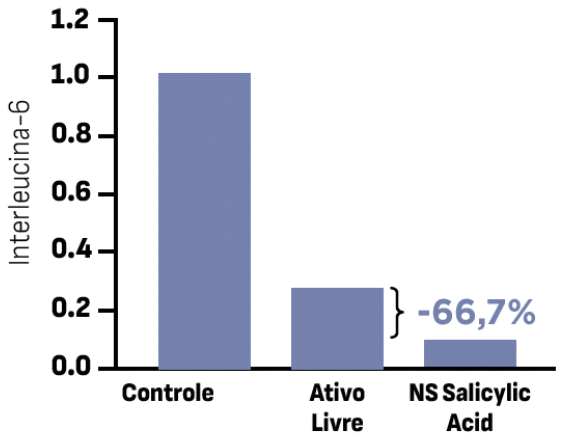
SALICYLIC ACID

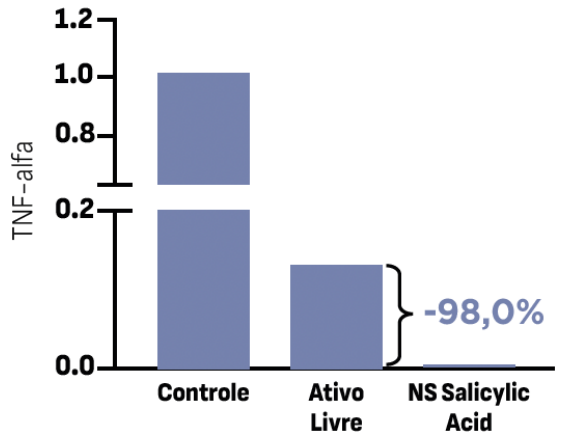
SA

Composition:

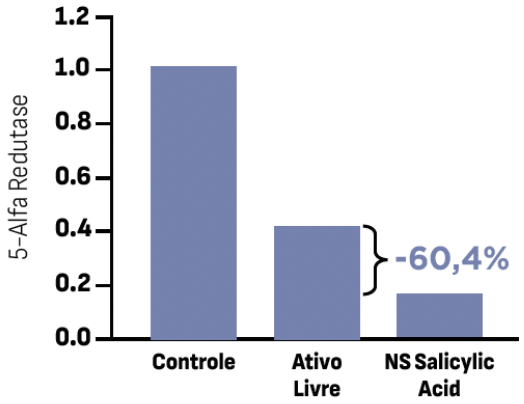
SALICYLIC ACID

DERMOCALMING EFFECT

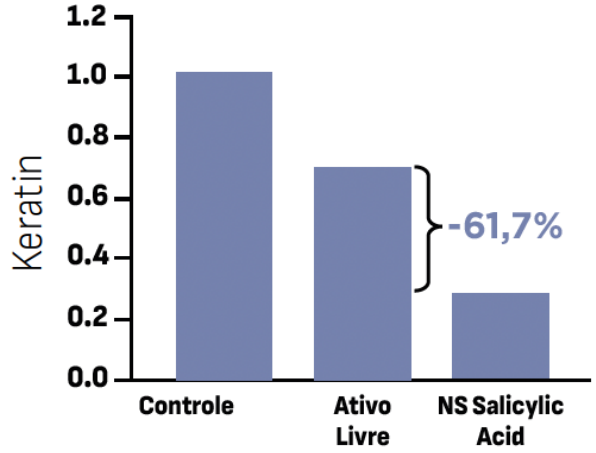




REDUCTION OF SKIN OILINESS



REDUCES HYPERKERATINIZATION



CLASSIC

NS

TRANEXAMIC ACID

TA

Composition:

TRANEXAMIC ACID

Anti-inflammatory properties.

Reduction of **melanin production**.

Soothing effect on the skin.

Inhibition of **tyrosinase activity**.

Widely recognised for its brightening properties, it acts as an ally against hyperpigmentation. By reducing melanin levels and inhibiting the activity of tyrosinase, a key enzyme in the skin pigmentation process, it presents an effective solution for treating dark spots. It also controls the synthesis of arachidonic acid and prostaglandins, contributing to the reduction of inflammation and redness, providing a more even skin tone and diminishing areas of hyperpigmentation.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Liposome	Hydrophilic gels, serums, lotions, creams, aqueous cosmetic products, and O/W type emulsions with low lipid content.	1 to 3%	Products with a high content of surfactants and/or lipids.	Enzymatic (slow release)	4,0 – 9,0	Slightly yellowish	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

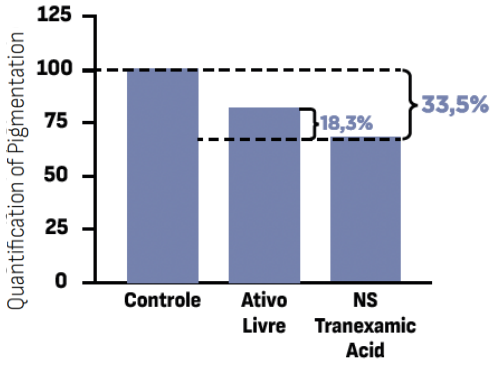
TRANEXAMIC ACID

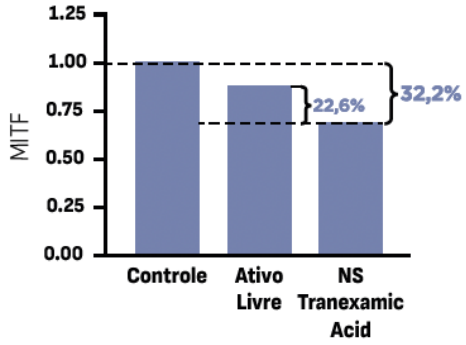
TA

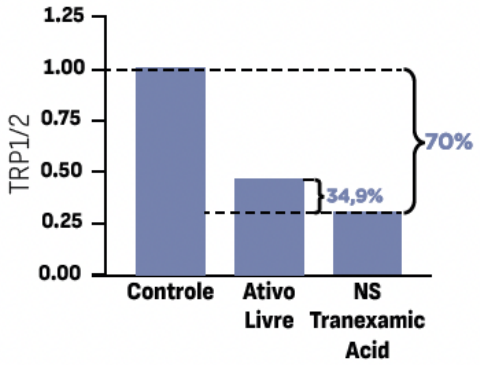
Composition:

TRANEXAMIC ACID

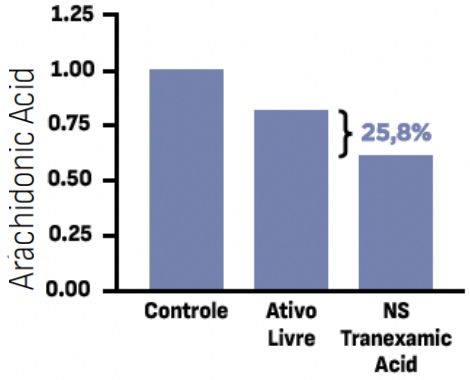
BRIGHTENING EFFECT

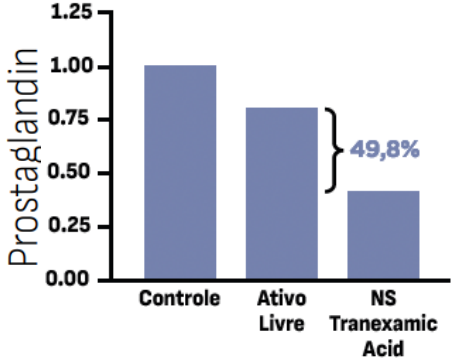




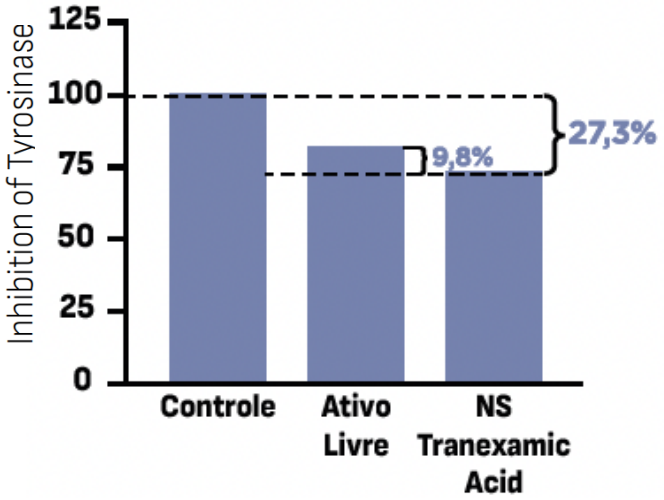


ANTI-INFLAMMATORY ACTION





INHIBITION OF TYROSINASE ENZYME



CLASSIC

NS

RESVERATROL

RV

Composition:
RESVERATROL

Protection against the **oxidative effects** of **UV radiation**.

Reduction of **pigmentation**.

Stimulation of **elastin synthesis**.

Antioxidant action.

NS Resveratrol combats natural oxidative stress and rejuvenates the skin by activating sirtuins, proteins that regulate ageing. Its antioxidant properties firm the skin, combat sagging, reduce wrinkles, and brighten dark spots. NS Resveratrol provides greater efficacy than its free form due to improved penetration and protection against premature degradation, resulting in a more efficient anti-ageing effect.

TECNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 10%	Oily excipients with an aromatic ring chemical structure	Enzymatic (slow release)	4,0 – 8,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

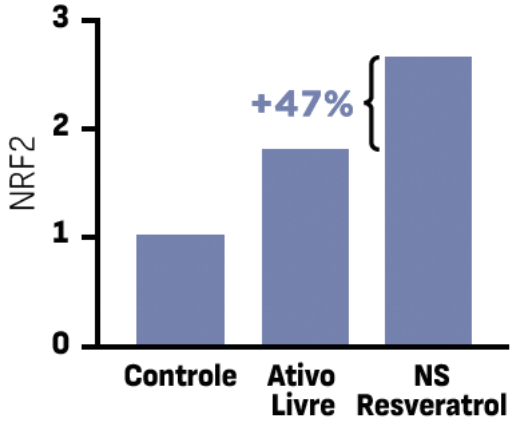
NS

RESVERATROL

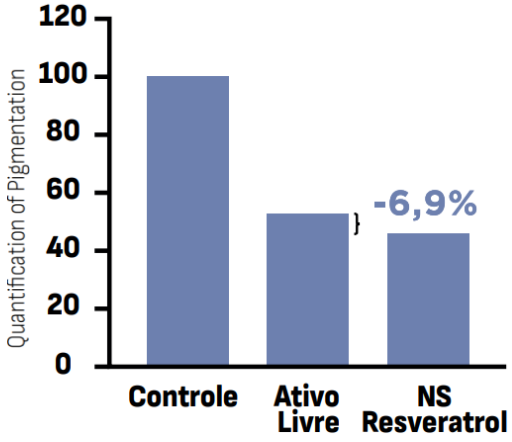
RV

Composition:
RESVERATROL

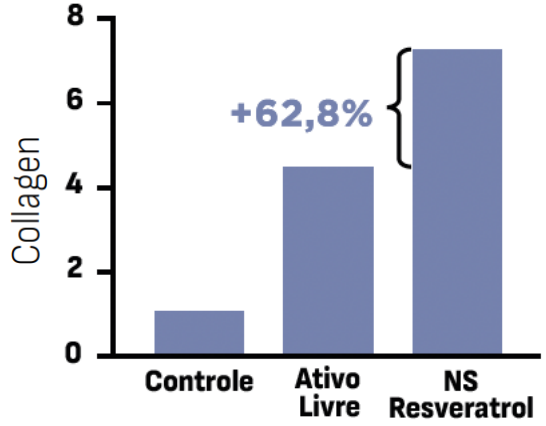
PROTECTION AGAINST UV RADIATION

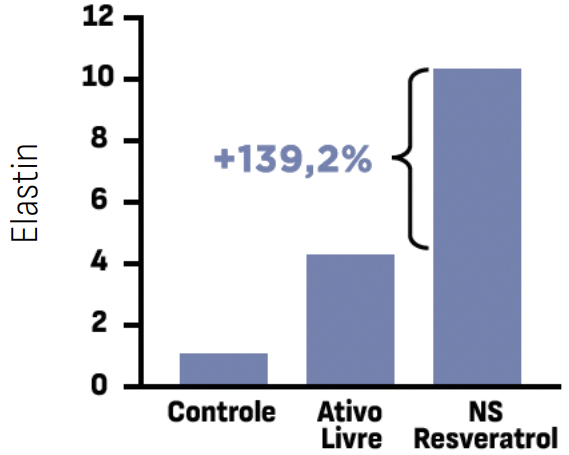


LIGHTENING EFFECT

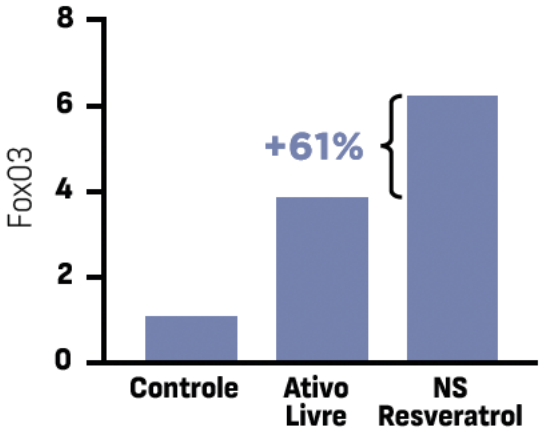


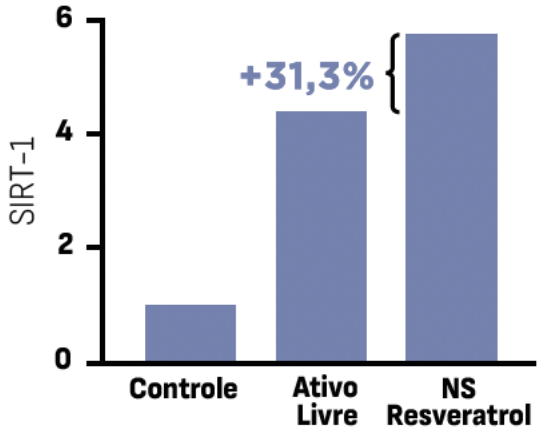
SKIN FIRMNESS





PROTECTION AGAINST THE EFFECTS OF PHOTOAGING





CLASSIC

NS

RETINOL

RA

Composition:
RETINOL

Retinol is widely recognised as one of the most effective active ingredients against skin ageing, acting on the epidermis and, to a lesser extent, the dermis to strengthen the skin's protective function, stimulate collagen and elastin synthesis, reduce collagen degradation, and even out pigmentation. Being unstable and lipophilic, its penetration is limited; however, encapsulation in nanoparticles protects the active ingredient, increases its solubility, improves penetration, and ensures controlled release, enhancing both efficacy and tolerability, including in sensitive skin.

Protection against the **oxidative effects** of **UV radiation**.

Stimulation of **cell renew**.

Stimulation of **collagen synthesis**.

Inhibition of **tyrosinase activity**.

TECNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANIS	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	0,3 to 2%	Oily excipients with an aromatic ring chemical structure	Enzymatic (slow release)	4,0 – 8,0	Slightly yellowish	Milky	Water dispersible	20 – 35°C at the end of the process

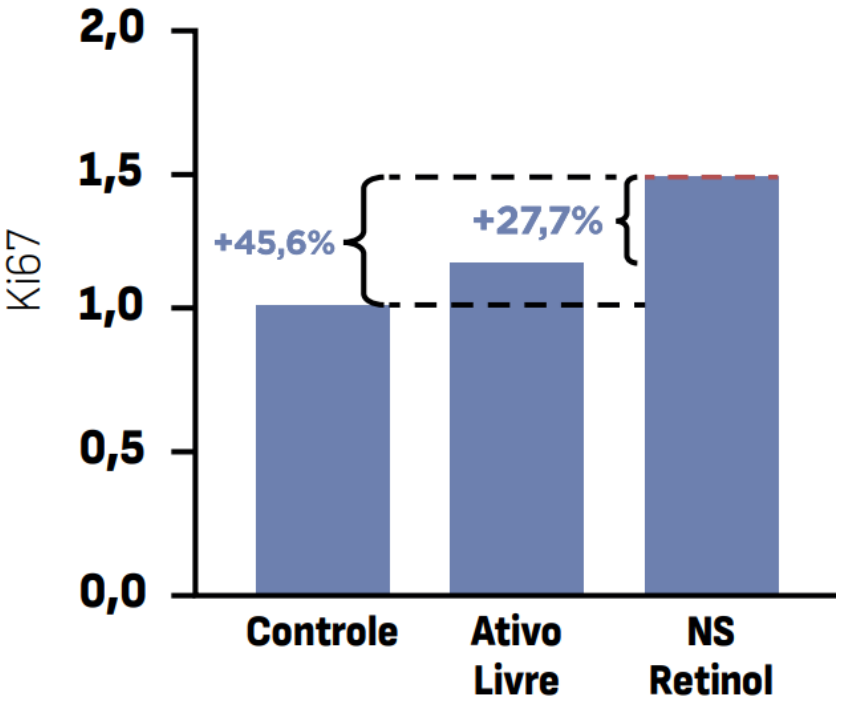
NS

RETINOL

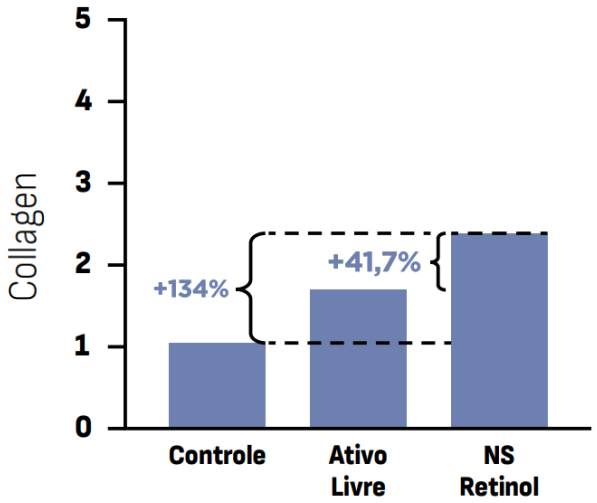
RA

Composition:
RETINOL

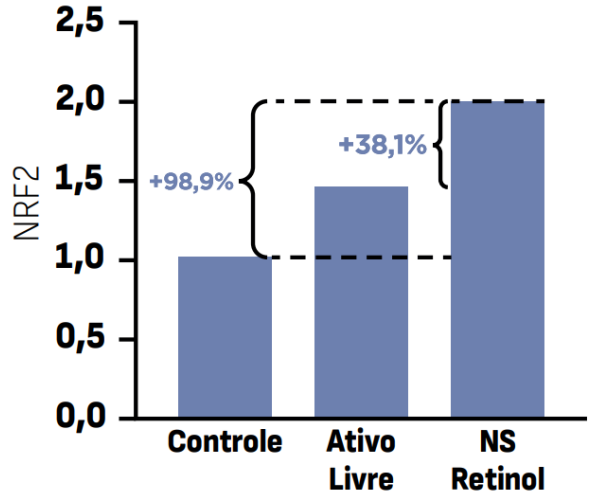
STIMULATION OF CELL RENEWAL



SKIN FIRMNESS



PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY RADIATION



CLASSIC

NS

COENZYME Q10

Q10

Composition:
COENZYME Q10

NS Coenzyme Q10 is an advanced nanostructured form developed to restore the skin's energy and vitality. Essential in cellular metabolism, its natural production decreases with ageing, directly affecting skin regeneration and defence against free radicals. Controlled and targeted release ensures action in the deeper layers of the skin, stimulating fibroblasts, enhancing cutaneous immunity, and promoting a firmer, more even, and rejuvenated appearance.

Protection against the **oxidative effects** of **UV radiation**.

Stimulation of **collagen and elastin synthesis**.

Rejuvenation through **wrinkle reduction**.

Stimulation of **cell renewal**.

Increase in **cellular energy**.

TECNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANIS	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 6%	Oily excipients with a chemical structure of aromatic rings	Enzymatic (slow release)	4,0 - 8,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

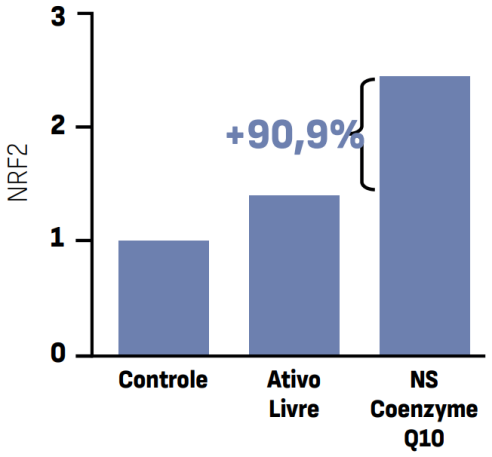
COENZYME Q10

Q10

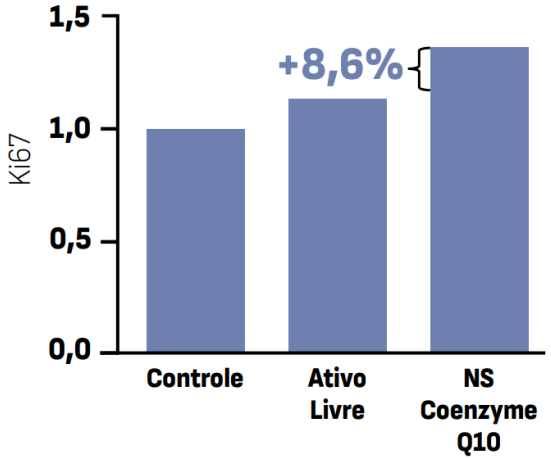
Composition:

COENZYME Q10

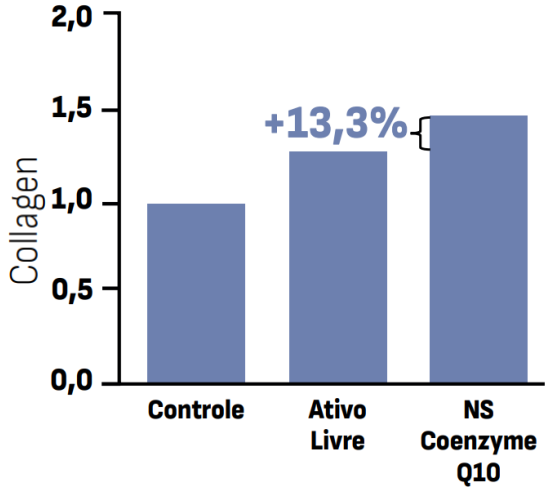
PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY UV RADIATION

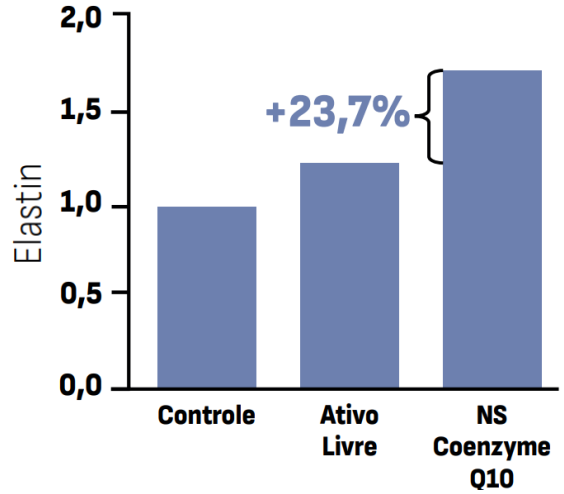


CELLULAR RENEWAL

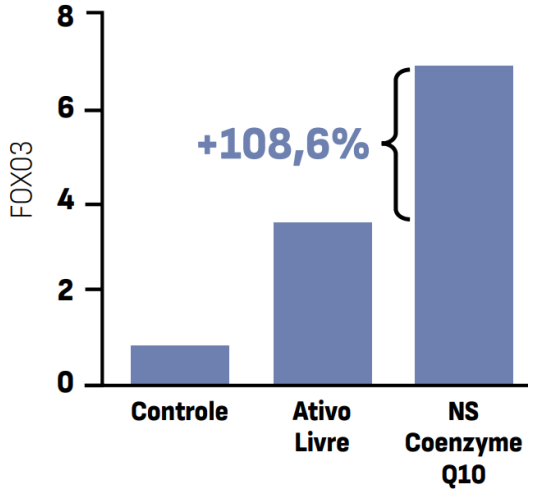


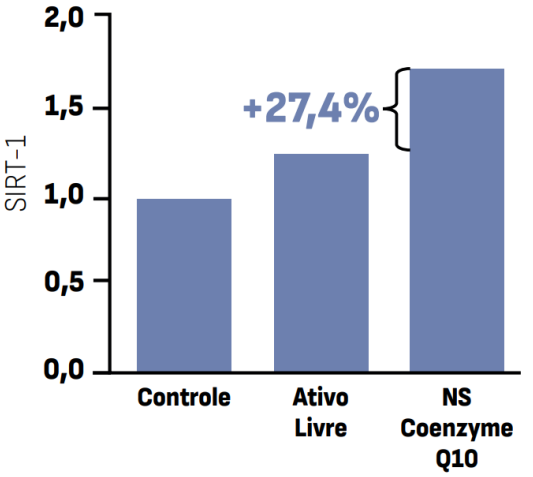
SKIN FIRMNESS





PROTECTION AGAINST THE EFFECTS OF PHOTOAGING





CLASSIC

NS

RETINOL PALMITATE

RP

Composition:

RETINOL PALMITATE

NS Retinol is a nanoencapsulated form of retinyl palmitate that ensures greater stability, penetration, and efficacy of the active ingredient. Converted into retinol in the deeper layers of the skin, it stimulates cell renewal, collagen and elastin synthesis, and promotes firmness and evenness. Its controlled release reduces irritation and improves tolerability in sensitive skin, providing a long-lasting rejuvenating and brightening effect.

Protection against the **oxidative effects** of **UV radiation**.

Stimulation of **cell renew**.

Stimulation of **collagen synthesis**.

Inhibition of **tyrosinase activity**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPA-TIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUC-TURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	0,5 to 2%	Oily excipients with an aromatic ring chemical structure	Enzymatic (slow release)	4,0 – 8,0	Slightly yellowish.	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

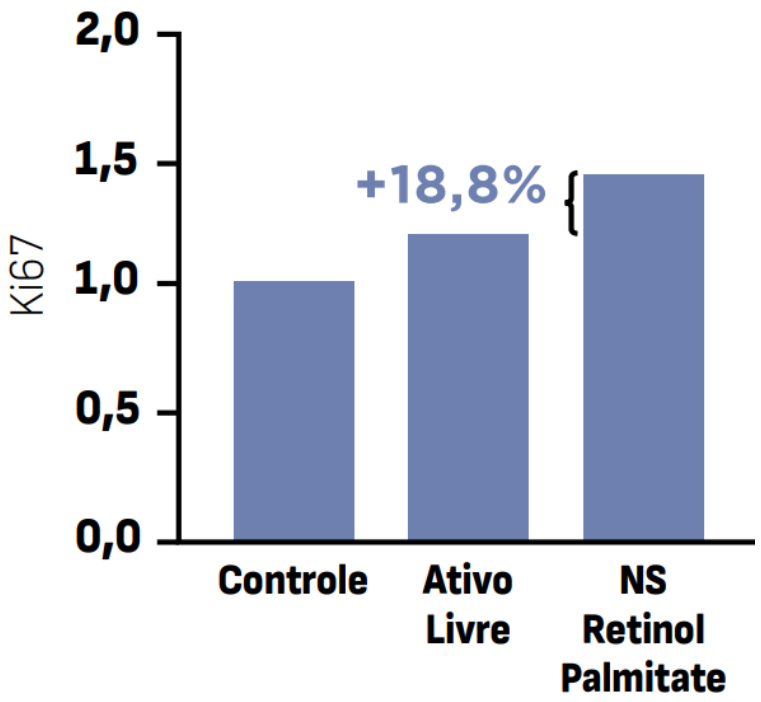
RETINOL PALMITATE

RP

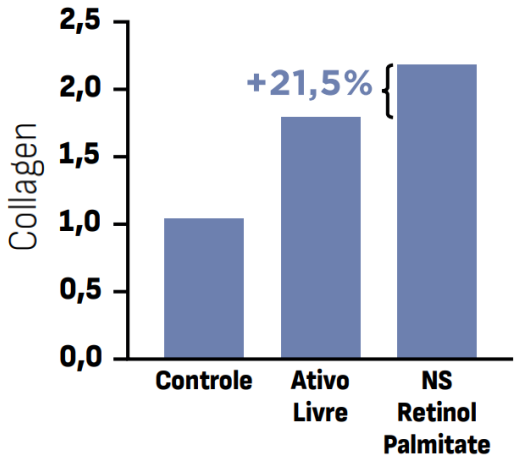
Composition:

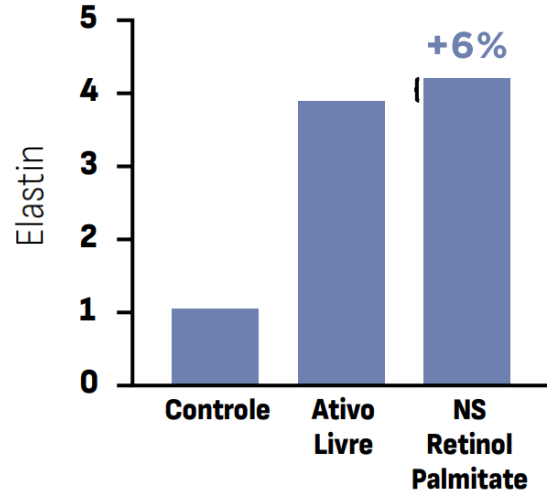
RETINOL PALMITATE

STIMULATION OF CELL RENEWAL

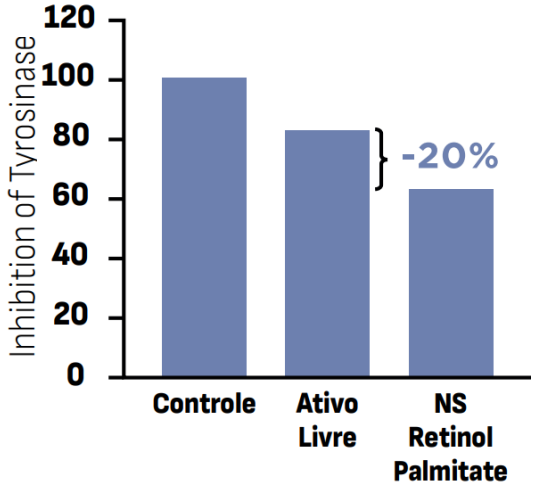


SKIN FIRMNESS





INHIBITS THE ACTION OF TYROSINASE



CLASSIC

NS

TOCOPHEROL ACETATE

Tc

Composition:
TOCOPHEROL ACETATE

NS Tocopherol Acetate is a nanoencapsulated form of Vitamin E that enhances its antioxidant and dermocalming action, protecting the skin against damage caused by free radicals and reducing inflammatory mediators. The nanoparticulate technology increases the solubility, stability, and penetration of the active ingredient, allowing it to reach the deeper layers of the skin. Its controlled enzymatic release ensures prolonged protection, promoting stronger, balanced, and healthier skin.

- **Protection** against the oxidative effects of **UV radiation**.
- **Increase** in **cellular energy**.
- **Simulation** of **collagen and elastin synthesis**.
- **Anti-wrinkle** action.
- **Stimulation** of **cell renewal**.
- **Soothing effect** on the skin and **post-sun calming**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Nano Polymeric	Serums, lotions, creams, and aqueous or O/W emulsion-type cosmetic products.	1 to 6%	Oily excipients with aromatic rings in their chemical structure.	Enzymatic (slow release)	4,0 – 8,0	White	Milky	Water dispersible	20 – 35°C at the end of the process

CLASSIC

NS

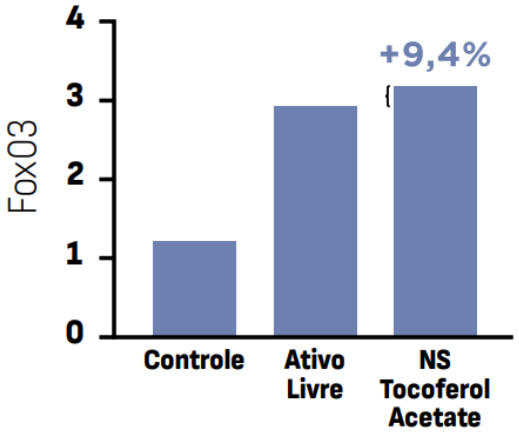
TOCOPHEROL ACETATE

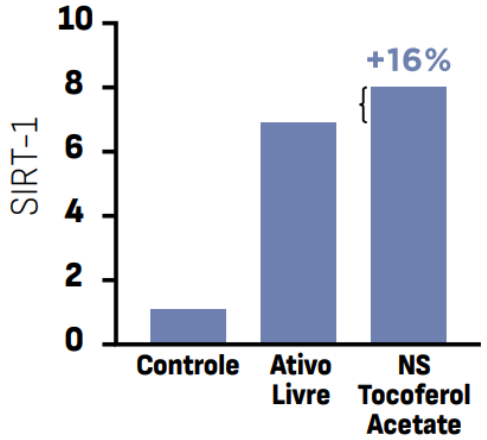
Tc

Composition:

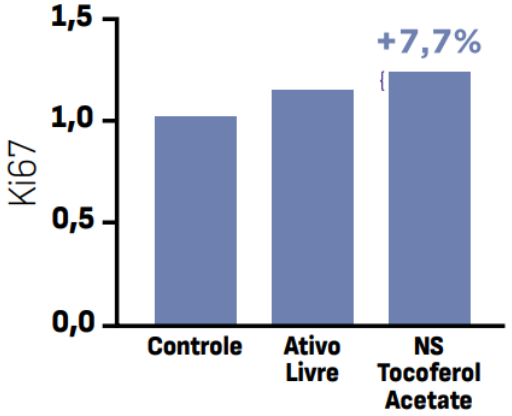
TOCOPHEROL ACETATE

PROTECTION AGAINST THE EFFECTS OF PHOTOAGING

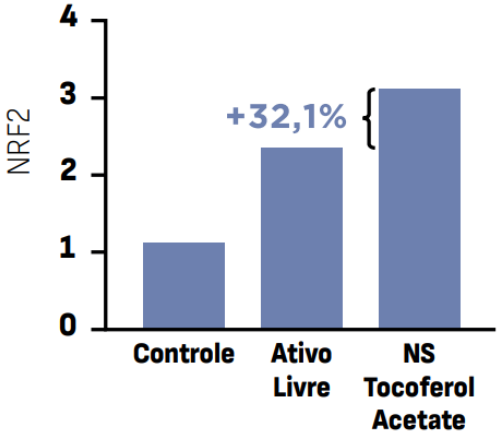




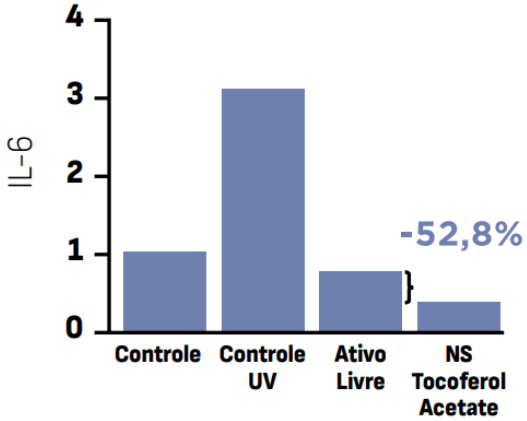
STIMULATION OF CELL RENEWAL

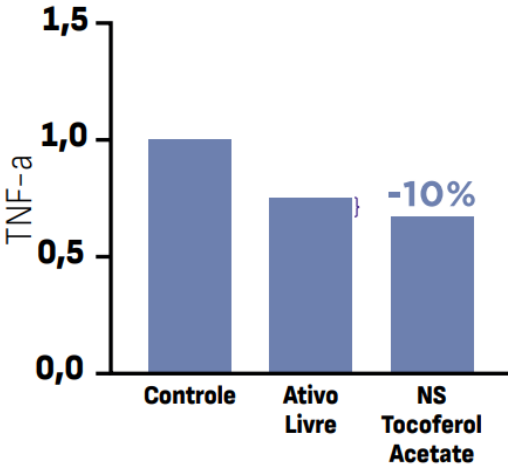


PROTECTION AGAINST OXIDATIVE EFFECTS CAUSED BY UV RADIATION



DERMOCALMING EFFECT





NS

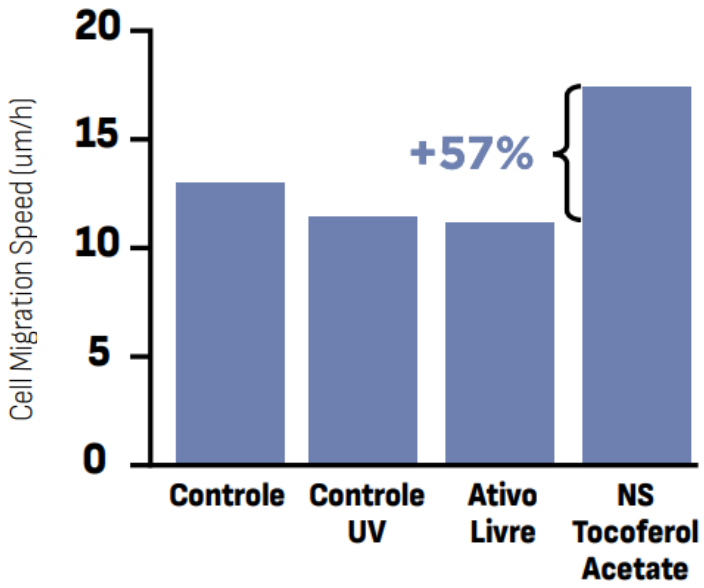
TOCOPHEROL ACETATE

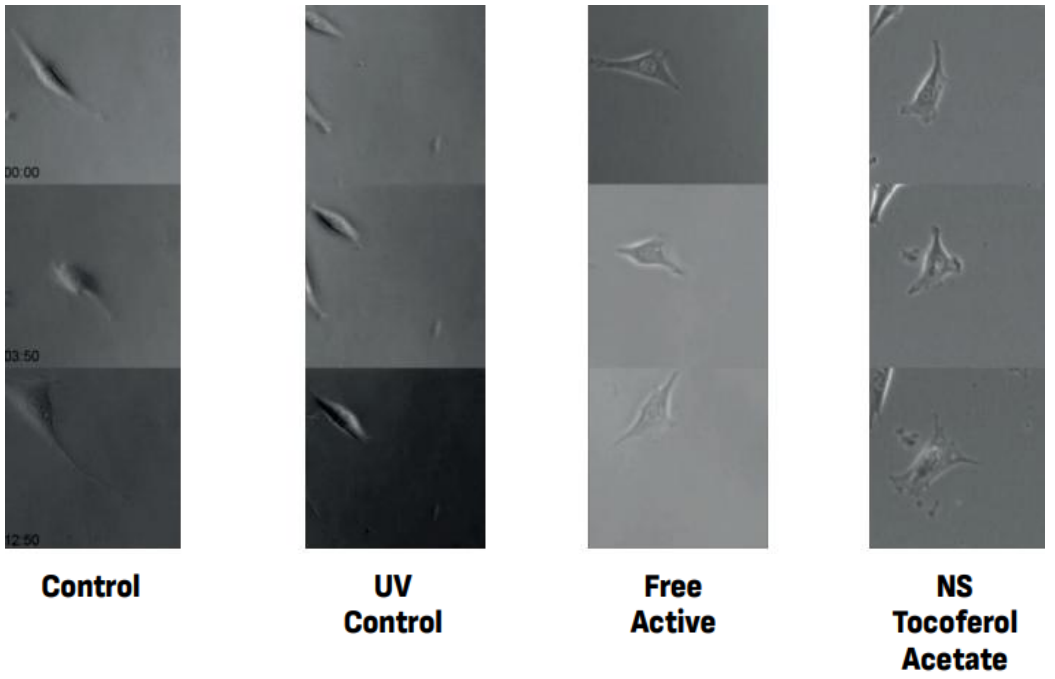
Tc

Composition:

TOCOPHEROL ACETATE

IMPROVEMENT IN CELLULAR METABOLISM AND ENERGY





The solutions containing the control groups and samples were applied to the surface of the skin model every 2 days for 7 consecutive days, and then the procedure for mRNA extraction was performed. The experiments were conducted in triplicate for each group.

CLASSIC

NS

NIACINAMIDE

B3

Composition:
NIACINAMIDE

NS Niacinamide is a versatile ingredient that acts to even out and restore the skin, improving its texture and tone, while exhibiting a dermocalming and highly effective anti-inflammatory effect. It also helps reduce oxidative stress, strengthening the skin barrier and contributing to protection against the effects of photoageing, resulting in healthy and long-lasting skin.

- **Stimulation** of **ceramide synthesis**.
- **Reduction** of **hyperpigmentation**.
- **Protection** of the **skin barrier**.
- **Soothing effect** on the skin.
- **Stimulation** of **renewal** and **increase** of **cellular energy**.
- **Protection** against the **degradation of the extracellular matrix**.

TECHNOLOGY	APPLICATION	% OF SUGGESTED USE	INCOMPATIBILITIES	RELEASE MECHANISM	PH	COLOR	APPEARANCE	SOLUBILITY	INCORPORATION OF THE NANOSTRUCTURE INTO BASES
Liposome	Serums, lotions, creams, and aqueous or O/W type emulsion cosmetic products	1 to 6%	Products with a high content of surfactants, as well as W/O emulsions.	Enzymatic (slow release)	4,0 – 9,0	Slightly yellowish.	Translucent	Water dispersible	20 – 35°C at the end of the process

NS

NIACINAMIDE

B3

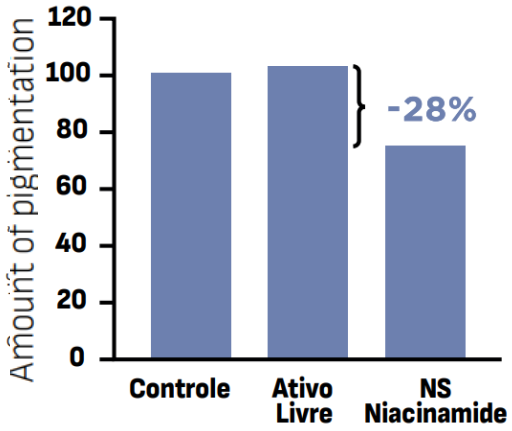
Composition:

NIACINAMIDE

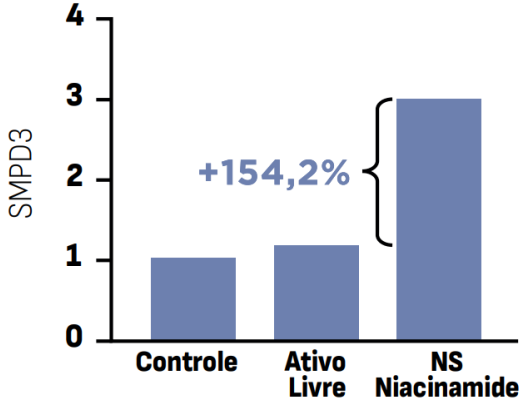
Controle

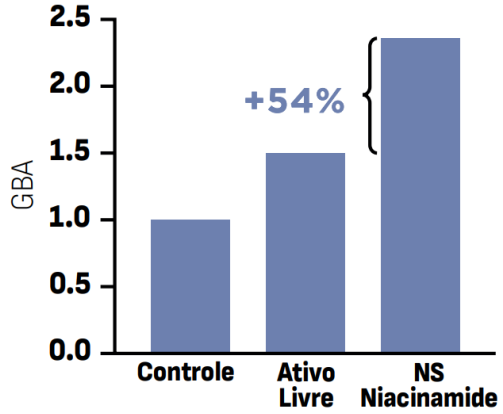
NS Niacinamide

LIGHTENING EFFECT

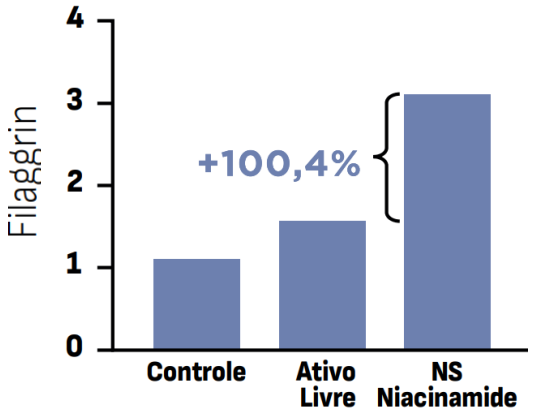


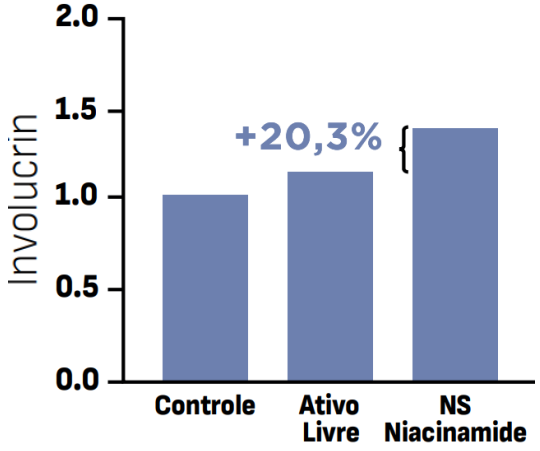
STIMULUS FOR CERAMIDES SYNTHESIS





PROTECTION OF THE SKIN BARRIER





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