

V3DS Sculpt

Vegan Deep Down Delivery Nanovesicles
with 0,02% Heptapeptide-6

V3DS Sculpt_01

-1,9 CM
MAX REDUCTION
OF THIGH CIRCUM-
FERENCE

+21%
SKIN ELASTICITY

-28%
LESS FAT
(TRYGLICERIDES)

+10%
SKIN FIRMNESS

+330%
LIPASE ACTIVITY

**PUSH UP
EFFECT**

**CELLULITE
REDUCTION**



Intertek



ASI-ACC-056



Ndermal

by Nanovex Biotechnologies

V3DS Sculpt

Code: 20412

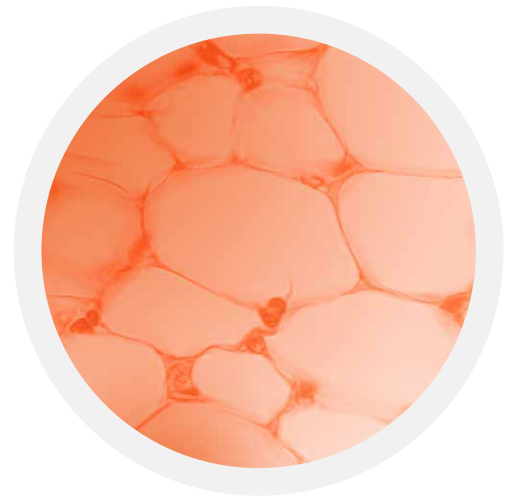
Description:

HEPTAPEPTIDE-6 (0.02 %) encapsulated in vegan deep down delivery nanovesicles (V3DS - Deep Down Delivery System) to add in cosmetic, cosmeceutical or dermo pharmaceutical formulations.

INCI: AQUA, MANNITOL, PHOSPHATIDYLCHOLINE, GLYCERIN, METHYLPROPANEDIOL, DIPOTASSIUM GLYCYRRHIZATE, POLYGLYCERYL-10 LAURATE, CETYL ALCOHOL, CAPRYLYL GLYCOL, PHENYLPROPANOL, HEPTAPEPTIDE-6

Appearance: White. Liquid

Preservatives: CAPRYLYL GLYCOL, PHENYLPROPANOL AND METHYLPROPANEDIOL



APPLICATIONS



Body care

· Lipolytic effect · Firmness · Elasticity · Volume reduction · Improvement of orange peel skin ·

CLAIMS

- **-1,9 cm maximum reduction** of thigh circumference*
- **Up to 10 % more skin firmness***
- **Improvement of orange peel skin ***
- **“Push-up” effect** by improving dermis density * (according to efficacy study)



1-10%
RECOMMENDED DOSAGE



99,8%
NATURAL ORIGIN*



Up to **15 times greater** concentration than other standard liposome products



150-300 nm
AVERAGE SIZE



Readily Biodegradable**



Very good skin compatibility***



* According to ISO 16128.

**

According to OECD criteria. The biodegradability of this product is calculated from the accumulated biodegradability data of the individual constituents used in the manufacture of this product.

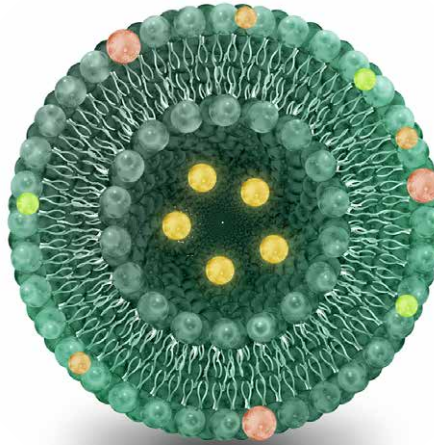
According to patch test

Certifications





POWERFUL COLLABORATION BETWEEN TWO MEDICAL AND SCIENTIFIC COMPANIES



With over 10 years of experience in encapsulating pharmaceutical and cosmetic actives, achieving an X20 times increase in their effectiveness through targeted delivery.



A spin-off from Vall d'Hebron Hospital, a nationally and internationally renowned hospital for its innovations and awards in the field of oncology.

V3DS Delivery System

Crafted with precision and care, V3DS features an exclusive ultra-deformable composition, meticulously engineered to enhance its permeability through the intricate extracellular matrix of skin cells. This unique formulation ensures that active compounds are efficiently transported to their target, the adipocytes in the hypodermis, maximizing the effectiveness of the encapsulated peptide.

BENEFITS OF THE ENCAPSULATION VEGAN DDS

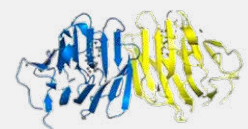
- ✔ Protects active against degradation
- ✔ Maximum delivery of the active ingredient into the deep down skin levels
- ✔ Gradual delivery for longer lasting effect
- ✔ Increases the bioavailability of the active ingredient
- ✔ Avoids colour changes in the cosmetic product
- ✔ Biomimetic nanovesicle with high moisturising and restorative action

Patented peptide

The new peptide was bioinspired by the sex hormone binding globulin (SHBG). This protein strongly binds sexual steroids and controls how much of them are available in the body. However the research revealed that SHBG does more than just bind hormones: it also helps control fat buildup, breaks down accumulated fat (lipolytic effect), and has anti-inflammatory properties. This peptide mimics the behaviour of SHBG being incredibly powerful for removing stubborn fat under the skin.

PEPTIDE PROPERTIES

- ✔ Ad-hoc bio-inspired developed peptide
- ✔ Lipolytic effect
- ✔ Unique on the market
- ✔ Fat reducer and inhibitor
- ✔ Body sculpt
- ✔ Specific and exclusive technology

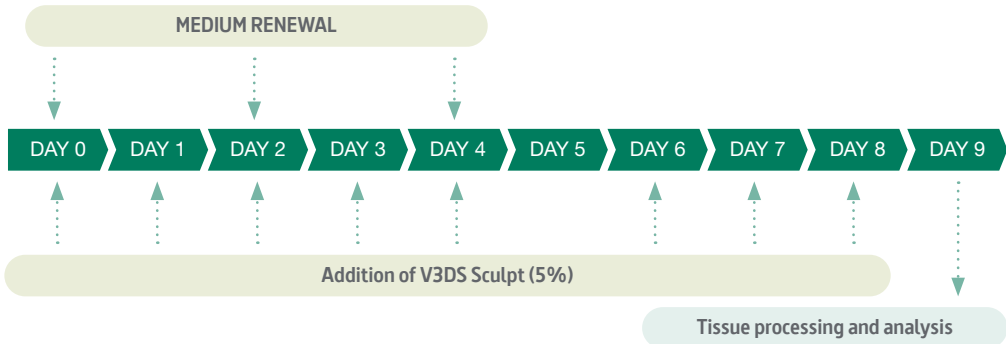


SHBG reduces liver fat accumulation



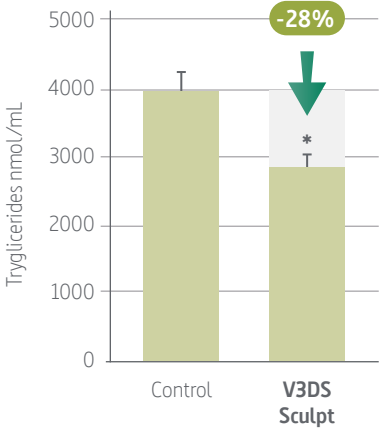
Proven efficacy ex vivo

- + Gel with 5% V3DS Sculpt
- + Human organotypic skin explant cultures (hOSECs)

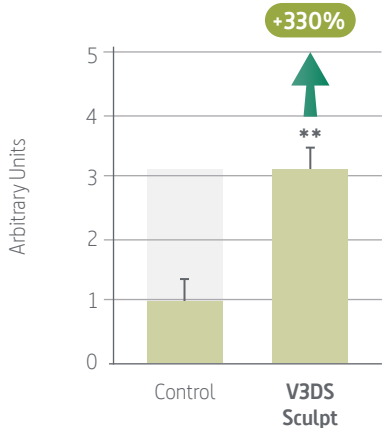


LIPOLYTIC EFFECT

TRYGLYCERIDE REDUCTION

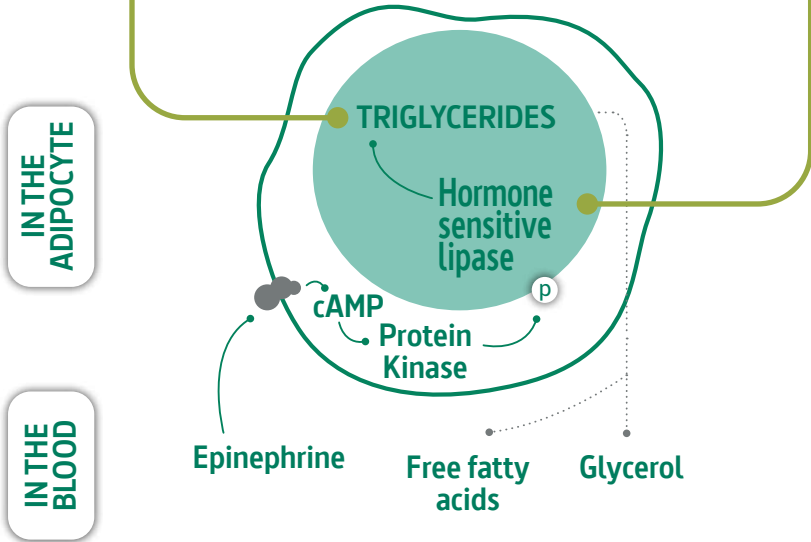


LIPASE ACTIVATION



-28% triglycerides
 promoting a smoother and more toned appearance

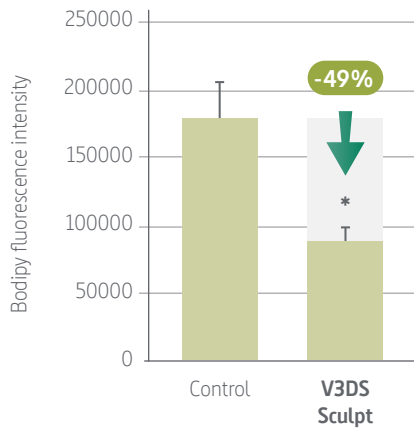
330% lipase activation
 higher capacity of breaking down fat





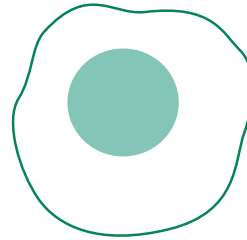
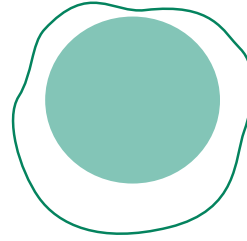
Proven efficacy ex vivo

FAT REDUCTION IN ADIPOSE CELLS



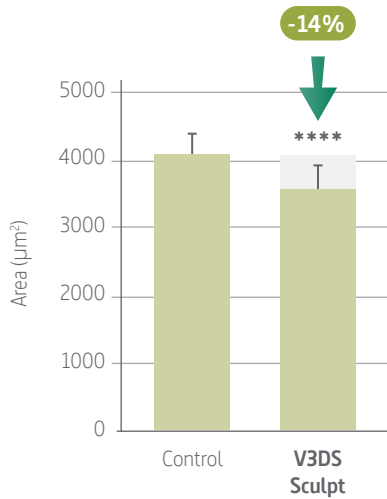
-49% fat in adipose cells
measured through bodipy dye

BEFORE



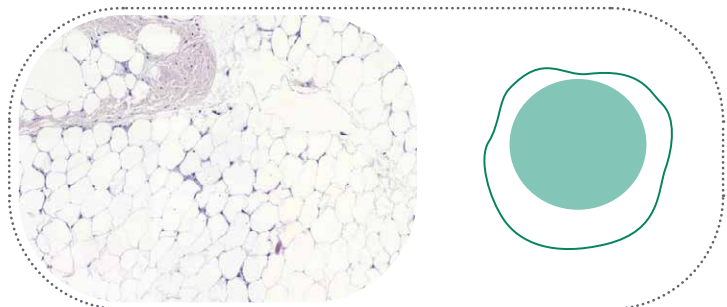
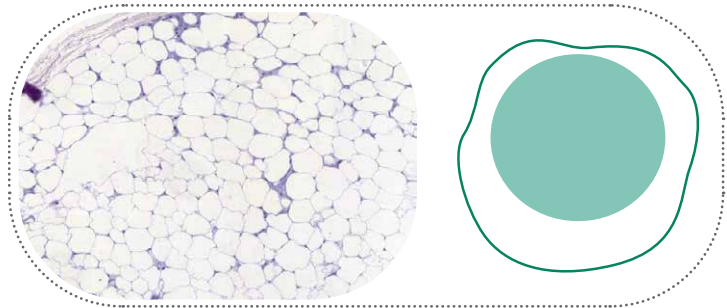
AFTER

REDUCTION IN ADIPOCYTE AREA



-14% adipocyte area
causing a reduction in volume

BEFORE



AFTER



DOWNLOAD EFFICACY STUDY

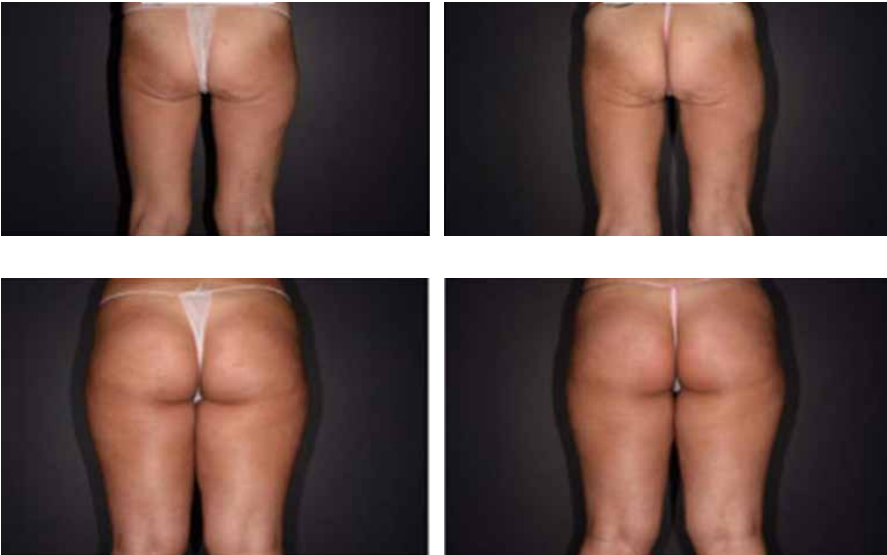


Proven efficacy in vivo

- + Gel with 5% V3DS Sculpt as the only active ingredient
- + 30 healthy female subjects aged between 18 and 50 years old, showing cellulite stage II and III.
- + 56 days of treatment

T0

T56



Up to 10 % more skin firmness
clinically and statistically significant

Up to 21% more skin elasticity
clinically and statistically significant

-1,9 cm maximum reduction of thigh circumference

T0

T56



T0

T56

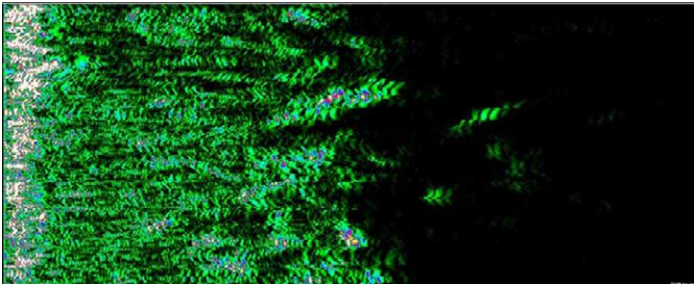


Improvement of orange peel skin
clinically and statistically significant

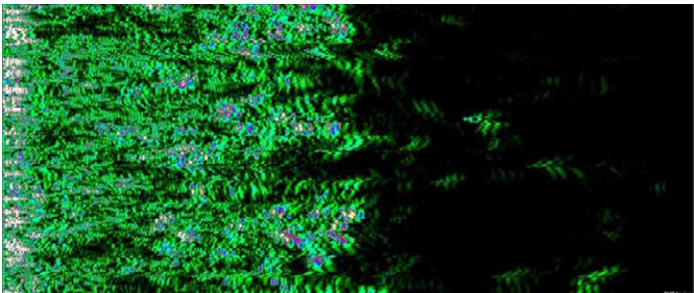


Proven efficacy in vivo

T0

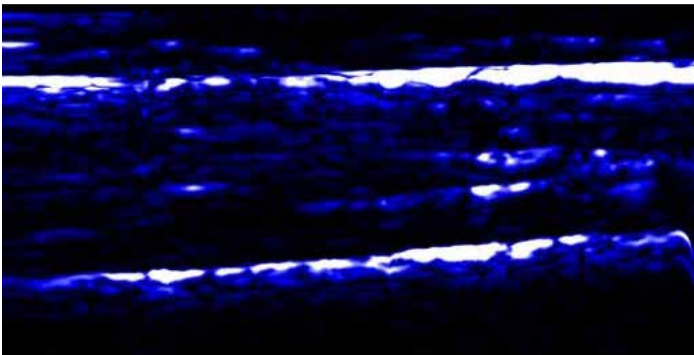


T56

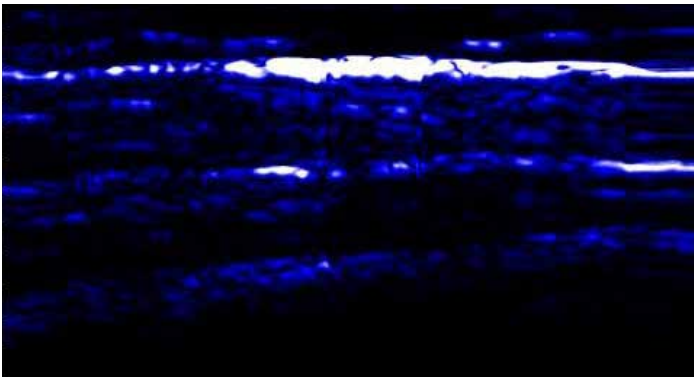


“Push-up” effect by improving dermis density
(density in green)

T0



T56

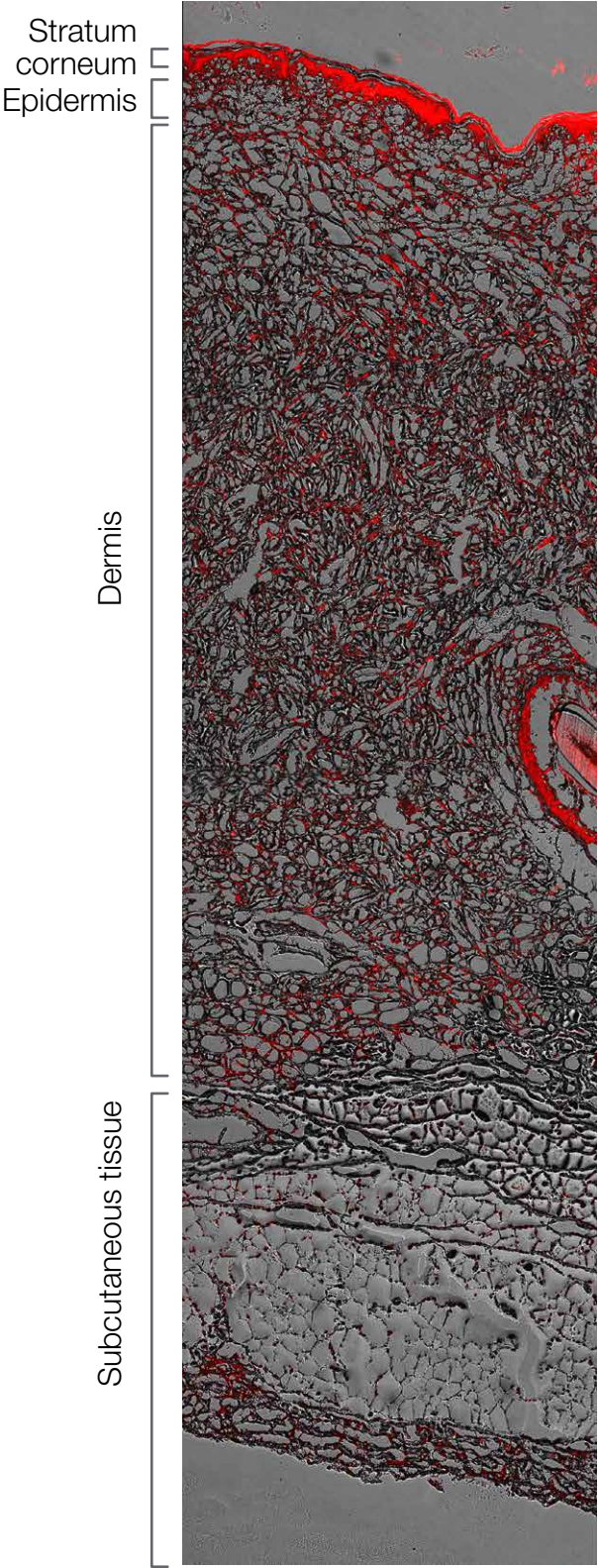


Reduction in fat tissue
fat content in blue

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Targeted delivery of V3DS System



- + 7 hours of application
- + Liposomes with rhodamine marked lipids (red)
- + Human organotypical skin explant cultures (hOSECs)



Release of the peptide into the subcutaneous tissue

 **DOWNLOAD DELIVERY STUDY**



Notes for formulators: how to use

- Shake before using.
- If the product is stored under 12°C, let the product get room temperature before shaking. At low temperatures reversible changes in viscosity can occur.
- Add to bulk during the final phase of the production process, ensuring that the temperature does not exceed 40°C to avoid degradation of the encapsulated molecules. If you need to add it to higher temperatures, please consult our technical service.
- **Maximum homogenization:** 20.000 rpm
- **Formulation pH:** 3 – 11
- Ethanol concentrations higher than 15% may damage liposomes (contact our technical service for advice) Too high concentration of detergents may break liposomes.
- If you use them in a o/w formula, add them in aqueous phase.



Add at room temperature:

The liposome does not protect heat-sensitive actives from heat



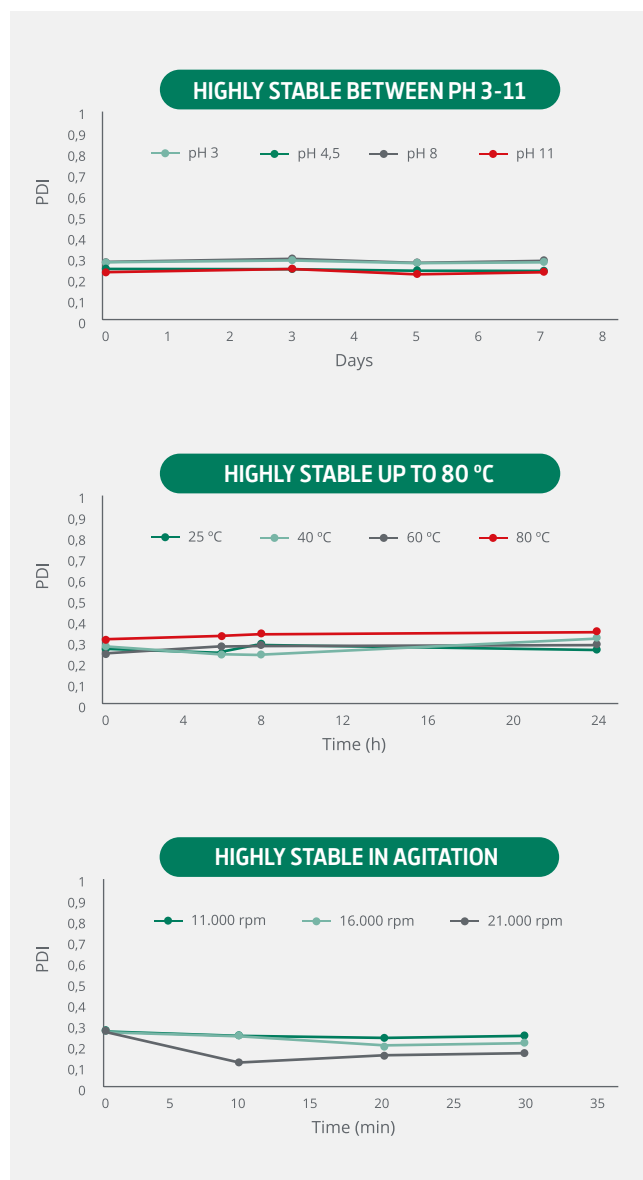
Liposomes can be added without any problem to any cosmetic mixture

- Water-based formulas
- Oil-in-water emulsions
- Water-in-oil emulsions
- Gels
- Serums



Important:

Add the liposomes in the **aqueous** phase of the emulsion or in the last stage of the manufacture process



Stability of the empty Delivery System nanovesicles in different conditions

OTHER DELIVERY SYSTEMS AVAILABLE



DEEP DELIVERY SYSTEM

The active ingredients encapsulated in the “Deep Delivery” systems are delivered specifically to the deepest layers of the epidermis in order to have the most precise and intense effect on the structures and cells located therein: melanocytes, Langerhans cells, keratinocytes, basal cells, Merkel cells...



CORNEUM DELIVERY SYSTEM

The use of these superficial delivery systems substantially increases the concentration of the active ingredient in the stratum corneum, minimizing penetration at deeper levels. This is particularly useful in avoiding unwanted effects that can be caused at this level, for example when using active ingredients with a high irritant capability, like AHA.



HAIR DELIVERY SYSTEM

The “Hair Delivery” nanovesicles are formulated with cationic phospholipids and ceramides which give them high capillary adhesion and a considerable resistance to washing and rinsing. They progressively deliver the active ingredients to the hair stem cuticle, penetrating up to the cortex of the hair medulla, particularly when treating damaged hair.



CUSTOMISED PROJECTS

At INdermal, we are happy to place our processes, knowledge and collaboration at your entire disposal in order to provide you with an accessible and speedy nanobiotechnological service, as if it were an extension of your own R+D department. We also offer you any nanoencapsulation system that you may require for your formulations. We would be delighted to receive your ideas or proposals as well as carry out a preliminary analysis free of charge and in complete confidence.



Incorporate encapsulated active ingredients in your formulations and take your products to the next level of efficiency to surprise your customers and stand out from the competition.

 **DOWNLOAD CATALOGUE**



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