V3DS Sculpt

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

V3DS Sculpt_01

Intertek

asi accredited
ASI-ACC-056

INdermal
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

1-10%
RECOMMENDED DOSAGE

99,8%
NATURAL ORIGIN*

x15 LIPOSOME CONCENTRATION
Up to **15 times greater** concentration than other standard liposome products

NANO FREE
150-300 nm
AVERAGE SIZE

Readily Biodegradable**

Very good skin compatibility***

APPLICATIONS

Body care

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

CLAIMS

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

* 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

Intertek

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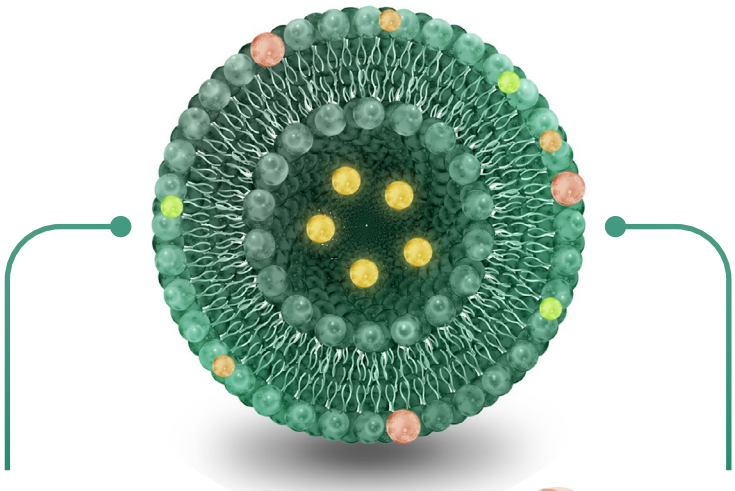
Patented

Lipolytic Peptides European Patent: EP21383114.2

POWERFUL COLLABORATION BETWEEN TWO MEDICAL AND SCIENTIFIC COMPANIES



INdermal by Nanovex Biotechnologies

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

EndoLipiD Therapeutics
Solutions for ectopic fat

Vall d'Hebron Recerca

A spin-off from Vall d'Hebron Hospital, an 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 ultradeformable 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 adipocites in the hypodermis, maximizing the effectiveness of the encapsulated peptide.

BENEFITS OF THE ENCAPSULATION VEGAN DDS

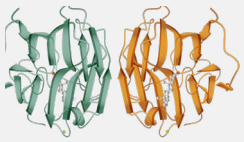
- **Protects active against degradation**
- **Maximum delivery of the active ingredient into the deep down skin levels**
- **Gradual delivery for longer lasting effect**
- **Increases the bioavailability of the active ingredient**
- **Avoids colour changes in the cosmetic product**
- **Biomimetic nanovesicle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

Patented peptide

The new peptide was bioinspired by the sex hormone binding globulin (SHBG). The research revealed that SHBG does more than just its known functions: 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 stuborn fat under the skin.

PEPTIDE PROPERTIES

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



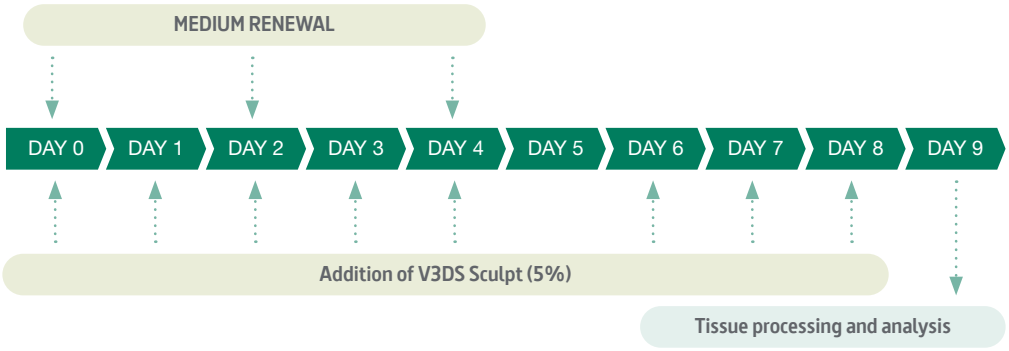
SHBG reduces liver fat accumulation

Related patents and scientific papers:

- Use of SHBG as a medicament_European Patent: nº 3003351 and US Patent: nº 10729634
- Sex hormone-binding globulin overexpression protects against high-fat diet-induced obesity in transgenic male mice. Saez-Lopez C, Villena JA, Simó R, Selva DM. J Nutr Biochem. 2020 Nov;85:108480. doi: 10.1016/j.jnutbio.2020.108480. Epub 2020 Aug 12. PMID: 32795655.
  Sex Hormone-Binding Globulin Reduction in Metabolic Disorders May Play a Role in NAFLD Development.
- Saez-Lopez C, Barbosa-Desongles A, Hernandez C, Dyer RA, Innis SM, Simó R, Selva DM. Endocrinology. 2017 Mar 1;158(3):545-559. doi: 10.1210/en.2016-1668. PMID: 28359088

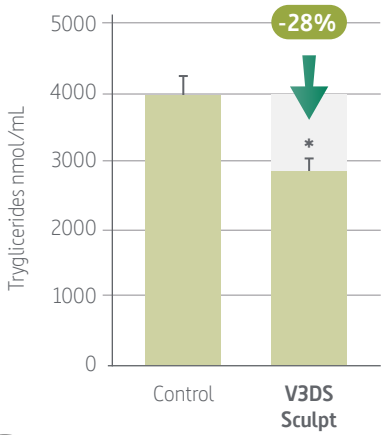
Proven efficacy ex vivo in skin explants

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

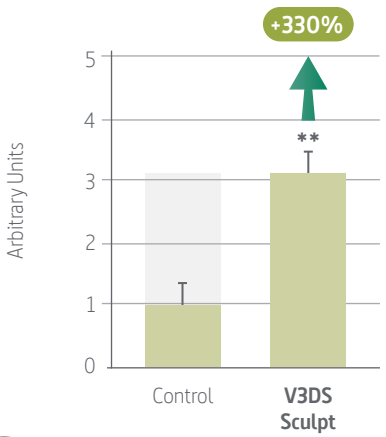


LIPOLYTIC EFFECT

TRYGLYCERIDE REDUCTION

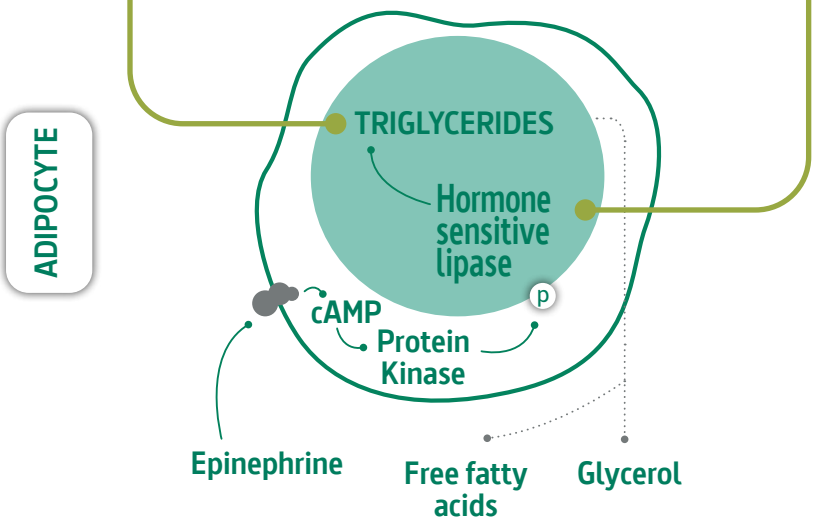


LIPASE ACTIVATION



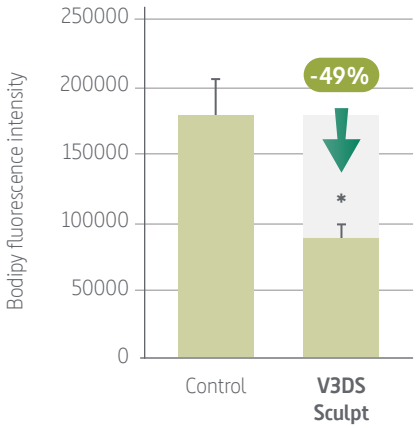
-28% triglycerides
promoting a smoother and more toned appearance

330% lipase activation
higher capacity of breaking down fat



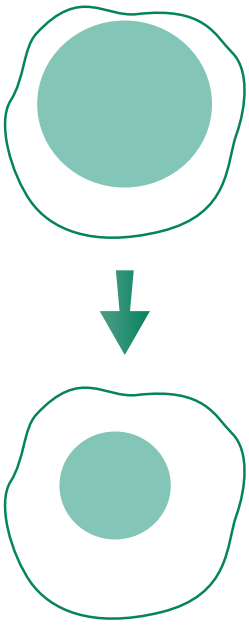
Proven efficacy ex vivo

FAT REDUCTION IN ADIPOSE CELLS



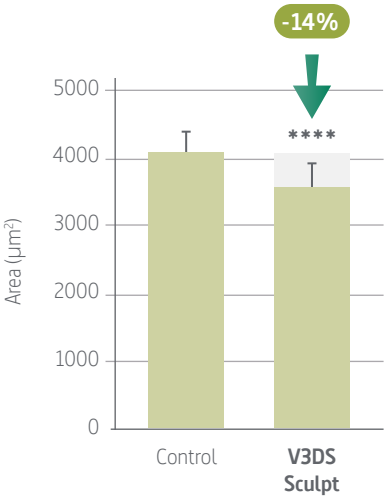
-49% fat in adipose cells
measured through bodipy dye

BEFORE



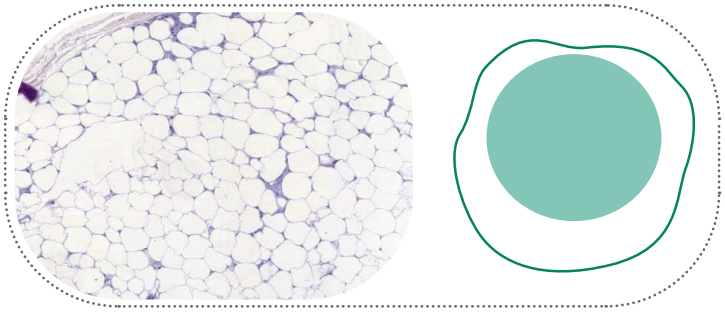
AFTER

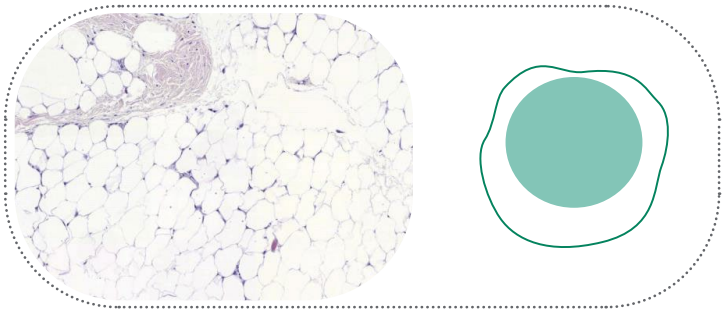
REDUCTION IN ADIPOCITE AREA



-14% adipocite area
causing a reduction in volume

BEFORE



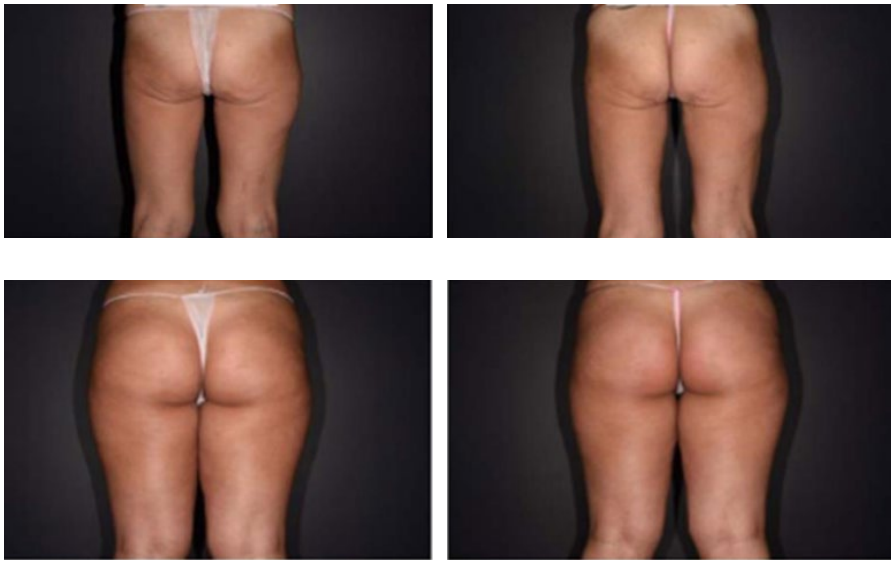


AFTER

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



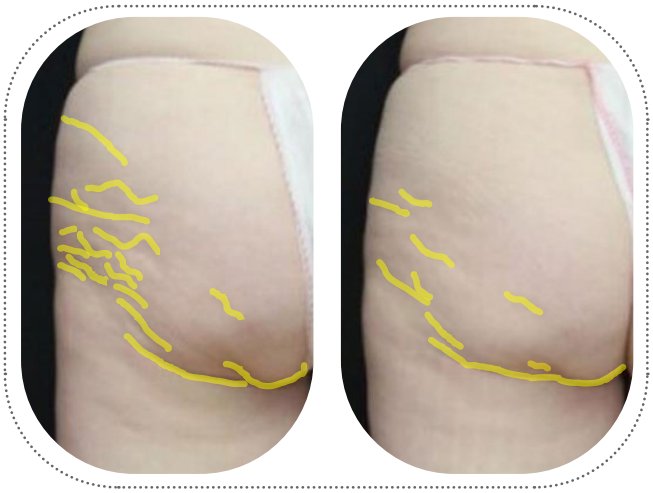
Up to 10 % more skin firmness
clinically and statistically significant

Up to 21% more skin elasticity
clinically and statistically significant

-1,9 cm maximum reduction of thigh circunference

T0 T56

T0 T56



Improvement of orange peel skin
clinically and statistically significant

Proven efficacy in vivo

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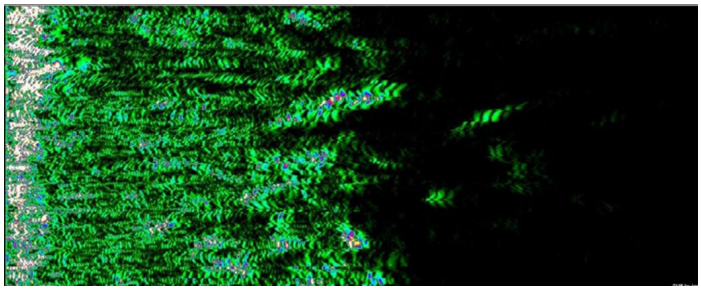
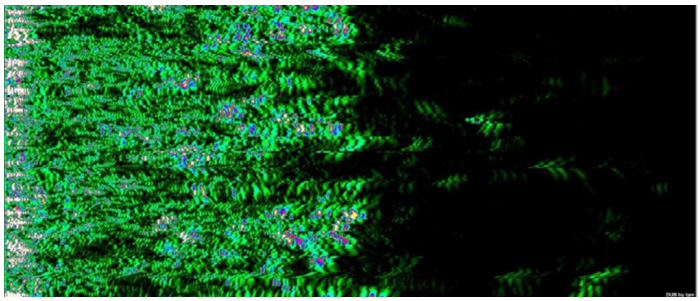
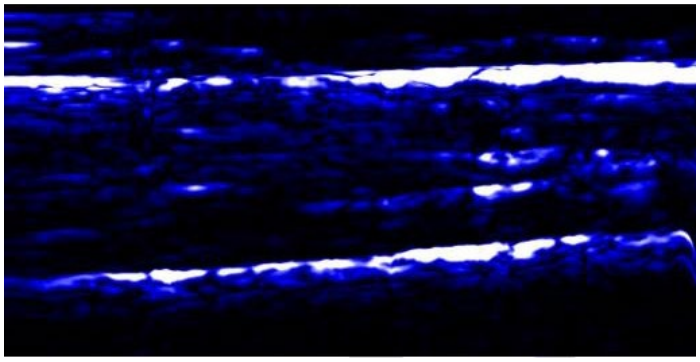


T56

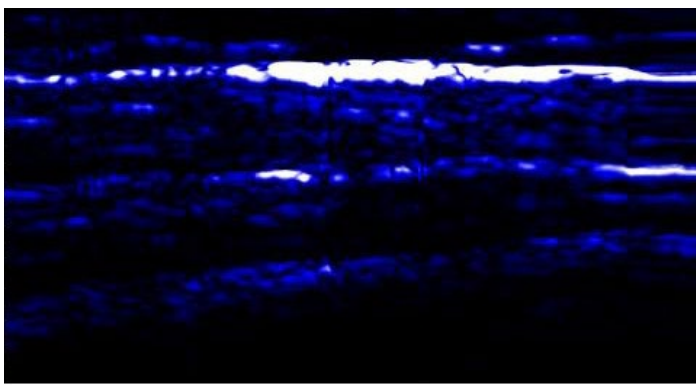


“Push-up” effect by improving dermis density
(density in green)

T0

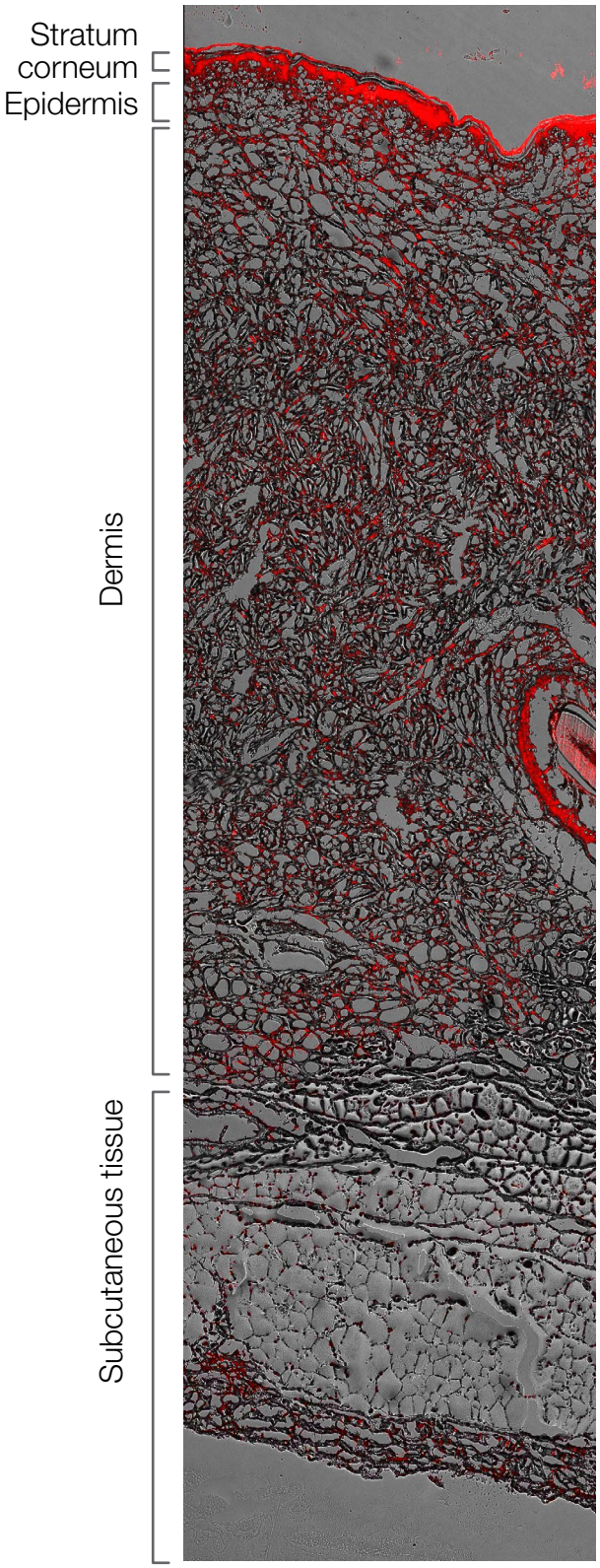


T56



Reduction in fat tissue
fat content in white and blue

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

Notes for formulators: how to use

- Shake before using.
- If the product is stored under 12ºC, 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 aquaseus phase.

Add at room temperature:

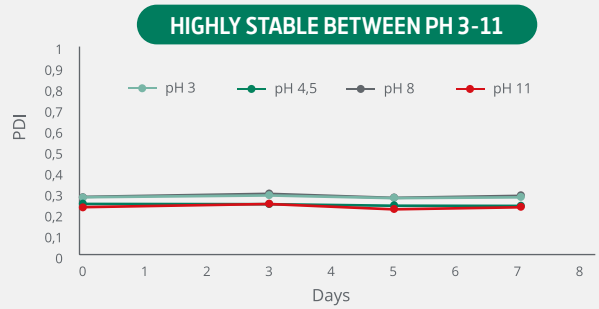
The liposome does not protect heat-sensitive actives from heat

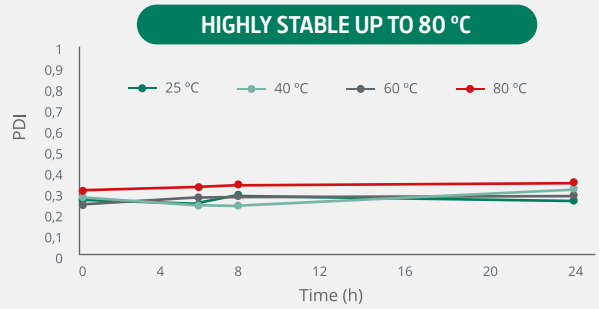
Liposomes can be added without any problem to any cosmetic mixture

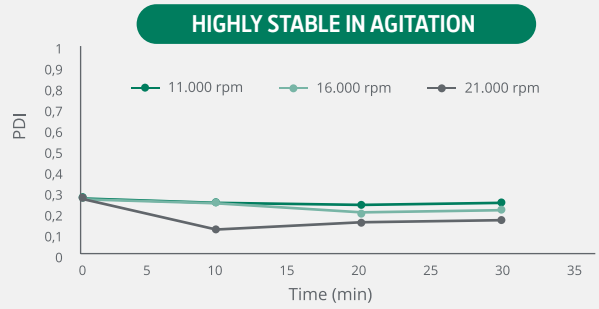
- Water-based formulas
- Oil-in-water emulsions
- Water-in-oil emulsions
- Gels
- Serums

Important:

Add the liposomes in the **aqueous** phase of the emmulsion 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, minimalizing 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.

INdermal
by Nanovex Biotechnologies

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.

CONTACT FORM

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REQUEST FREE SAMPLE

INdermal - Nanovex Biotechnologies
Parque Tecnológico de Asturias. CEEI.
33428 Llanera, Asturias. SPAIN
Tel.: +34 985 98 06 05

AENOR GESTIÓN DE LA CALIDAD ISO 9001 ER-0676/2018

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