



nano caviar

Active Ingredients: Caviar Extract, D-Panthenol and Hyaluronic Acid

Nano Caviar is a blend of active ingredients encapsulated in biopolymeric particles with particle diameter larger than 200nm. Encapsulation through the technology developed by Nanovetores allows the stabilization of sensitive components, therefore, complex of being formulated in their free form. The active ingredient can be incorporated in formulations for the skin, promoting nutrition, with antioxidant, regenerative, immunostimulant and anti-wrinkle action, as well as in hair products, ensuring high hydration and increase of capillary mass.



Features

Aspecto: Colorless liquid, slightly cloudy.

Usage Concentration: 0.5 to 10% **pH**

stability: 3.0 to 7.0

Dispersibility: Dispersion of actives encapsulated in water

Particle: Biopolymer

Release Trigger: Enzyme and temperature



Benefits

Skin

- Nutrition
- Antioxidant Action
- Anti-wrinkle Action
- Regeneration

Hair

- Hydration
- Increased capillary mass
- Protection for the hair strand



Usage

Nonionic, anionic and cationic emulsions, nonionic and anionic gels, shampoos and liquid soaps.



nanovetores
INOVANDO NATURALMENTE

Description

Nano Caviar is a blend of active ingredients encapsulated in nanoparticles through Nanovetores Technology. In its free form, the bioactive, caviar extract, presents instability against oxidation, associated with pharmacological difficulties of solubilization in the end product. The technology provides to the active ingredients, besides protection against oxidation, increased skin permeation, an increased sensory input in the end product, and high hydration - multifunctionality of Nanovetores particles. The blend of active ingredients in Nano Caviar promotes numerous benefits for both the skin and hair due to the properties of its bioactive ingredients, which are also associated with nanotechnology. The cosmetic benefits of caviar have become known since the mid-twentieth century. Studies indicate that caviar (from sturgeon eggs) helps in the process of skin rejuvenation because in its composition there are a variety of nutrients in perfect balance, and this characteristic promotes better absorption.

Hair: The active ingredient is indicated mainly for chemically treated or damaged hair. Nano Caviar has high content of essential amino acids, peptides, proteins, vitamins, essential fatty acids, trace elements and glycosaminoglycans that promote an increase of capillary mass, high hydration with protective film formation on the strand of hair (1). The regenerative power of Nano Caviar promotes nutrition, intense glow, vitality and softness to strands of hair (2). Nano Caviar technology allows the active ingredient to bind easily to the hair, reducing its porosity and strengthening the strands from the root to the tips, providing greater vitality, protection and shine. When activated by heat, Nano Caviar has enhanced effects.

Skin: The perfect balance of Nano Caviar components promotes better absorption of their nutrients, fully meeting skin needs. In addition to nutrition, the active ingredient promotes antioxidant, regenerative, immunostimulant and anti-wrinkle action (3). The tocopherols present in caviar extract are very effective as antioxidants as they protect cell membrane lipids from oxidation. α -tocopherol, or vitamin E, enhances the performance of biological activities in the body being of extreme importance to the skin (4). Also present in the blend, D-panthenol is an alcohol precursor of pantothenic acid (vitamin B5) that is part of coenzyme A, necessary for the structure and regeneration of epithelial lipids and mucous membranes. The active ingredient also develops a healing and dermal eutrophic effect, capable of increasing the resistance of the collagen fibers (5). In addition, Nano Caviar has an anti-inflammatory and regenerative action on epithelial cells, acting as a humectant, decreasing the dryness caused by the natural aging of the skin (6).

Regulatory Information

INCI NAME	CAS NUMBER
AQUA	7732-18-5
PANTHENOL	81-13-0
PROPYLENE GLYCOL	57-55-6
PHENOXYETHANOL	122-99-6
CAPRYLYL GLYCOL	1117-86-8
POLYVINYL ALCOHOL	9002-89-5
HYALURONIC ACID	9004-61-9
CAVIAR EXTRACT	-

Physical-chemical Information

PHYSICAL STATE	LIQUID
FORM	VISCOUS
COLOR	COLORLESS TO CLOUDY
ODOR	CHARACTERISTIC
pH	4.0 TO 6.0
DISPERSIBILITY	DISPERSION OF ACTIVES ENCAPSULATED IN WATER
RELATIVE DENSITY	0.9 TO 1.1 g/ML
CHEMICAL IDENTITY	ORGANIC
CHARACTERIZATION	BLEND

*As it contains natural active ingredients, the product may change in color and odor.

**Shake before using.



STORAGE:

KEEP AT ROOM TEMPERATURE BETWEEN 20 AND 25 °C.



COMPATIBILITY:

COMPATIBLE WITH NONIONIC, ANIONIC AND CATIONIC EMULSIONS, NON-IONIC AND ANIONIC GELS, SHAMPOOS AND LIQUID SOAP.



INCOMPATIBILITY:

ETHANOL AND OTHER ORGANIC SOLVENTS

References

1 - Challoner, N.I. Cosmetic Proteins for Skin Care. C&T. 1997, 112 (12): 51-63.

2 - Griesbach U, Klingels M, Hömer V. Proteins: Classic Additives and Actives for Skin and hair care. C&T. 1998, 113 (11): 69-73.

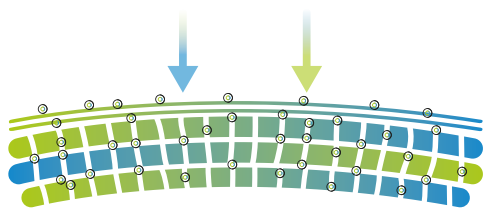
3 - Keller KL, Fenske NA, et al. Uses of vitamins A, C and E and related compounds in dermatology: a review. Journal of American Academy of Dermatology, 1998; vol 39: 611-625

4 - Le Poole HAC. Natural oils and fats multifunctional ingredients for skin care. Cosmetics & Toiletries Manufacture Worldwide, 1995; p: 47-56.

5 - SHAPIRO, S.S.; SALOU, C. Role of Vitamins in Skin Care. Nutrition, v. 17, n. 10, p. 839-844, 2001.

6 - WANG, L.; TSENG, S. Direct determination of D-panthenol and salt of pantothenic acid in cosmetic and pharmaceutical preparations by differential pulse voltammetry. Analytica Chimica Acta, v. 432, p. 39-48, 2001.

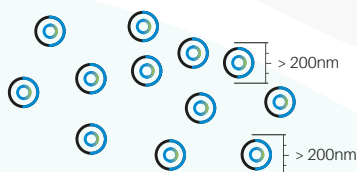
Nanovetores Encapsulation Technology



Multifunctional Biopolymeric Particles that promotes hydration and high permeation



Active Ingredient Protection against oxidation resulted from interaction with external environment and other components of the cosmetic formulation.



Monodispersity, that ensures control of the particle size, providing adequate permeation to its proposed action.



Secure particles larger than 200nm, biocompatible and biodegradable.



Enzymatic Specific Release Trigger, in which the enzymes present in our skin promote the degradation of the capsule, releasing the active ingredient.



Specific release trigger by temperature, where a heat source promotes the degradation of the capsule, releasing the active ingredient.

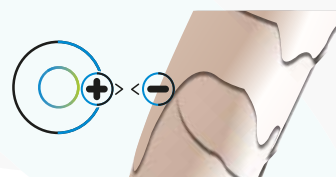


Deposição do ativo quando aplicado de forma livre



Maior permeação do ativo quando encapsulado

Greater Permeation on the contact surface due to the small size of the capsule.



Surface Charge Control of the particle, promoting greater affinity with the contact surface.



Water Base. Active ingredients are manufactured without the use of organic solvents, ensuring safety for users and the environment.

Use Encapsulated Active Ingredients and Ensure:

Stability Improvement

Increased compability in the formulation

Occlusion of odors

Increased skin permeation

Reduced dose

Use of sensitive active ingredients (without refrigeration)

Increased Solubility

Prolonged release

Increased effectiveness