

Antiaging action

Active Ingredients: Sodium hyaluronate.

Nano Hyaluronic Acid consists of sodium hyaluronate encapsulated in biopolymer particles with diameter larger than 200 nm. 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 may be incorporated into skin formulations, where it promotes wrinkle filling and skin hydration, as well as in hair products, decreasing porosity, making it brighter, more hydrated and improving hair elasticity. The product's natural features and non-existent toxicity allow its daily use, delivering effectiveness safely.



Features

Aspect: Colorless to yellow liquid. Usage Concentration: 0.5 to 10%

pH stability: 3.0 to 8.0 **Dispersibility:** Dispersion of encapsulated actives in water Particle: Biopolymeric. Release Trigger: Enzymatic.



Benefits

- Antiaging
- Wrinkle filler
- Moisturizer
- Antioxidant
- Enhances and restores facial volume



Usage

Face: Primers, creams, sunscreens and seruns.

Hair: Shampoos, conditioners, capillary finalizers and masks.



Description

Nano Hyaluronic Acid consists of encapsulated sodium hyaluronate, as the raw material is a well-known ally for treating skin and chemically damaged hair. Sodium hyaluronate is a hyaluronic acid sodium salt, a glycosaminoglycan and long-chain polymer present in many organisms, particularly in the eyes and umbilical cord, and it is used on the skin for wrinkle filling and hydration.

Hyaluronic acid has high capacity to bind to water molecules forming cohesive blocks⁽¹⁾. Topical application of this acid, due to this ability to form a cohesive block with water, decreases the appearance of expression lines and wrinkles, enhances and restores facial volume, making the skin smoother, firmer and rejuvenated⁽²⁾. The active also has antioxidant effect, as it acts as a sequester of free radicals, increasing the protection of the skin in relation to the radiation and contributes to the increase of tissue repair capacity⁽⁴⁾.

The active can also be used in capillary applications, where it acts filling and hydrating intensely the threads, due to its strong connection with the water, guaranteeing a beautiful and healthy hair (5).

Nano Hyaluronic Acid optimizes the action of this active ingredient, promoting reduction of wrinkles with anti-aging, tensioning and lifting action for the skin. It may also be used to soften the appearance of cellulite. For hair, it decreases porosity, making it brighter, more hydrated and improving hair elasticity, being specifically indicated for chemically treated or damaged hair.

Informações Regulatórias

INCINAME	CAS NUMBER
AQUA	7732-18-5
PHENOXYETHANOL	122-99-6
CAPRYLYL GLYCOL	1117-86-8
SODIUM HYALURONATE	9067-32-7

Informações Físico-Químicas

ASPECT	CLEAR TO SLIGHTLY CLOUDY LIQUID
COLOR	COLORLESS TO YELLOW
PH	5,0 TO 7,0
DISPERSIBILITY	DISPERSION OF WATER ENCAPSULATED ACTIVES
RELATIVE DENSITY	0.95 TO 1.1 G/ML
CHARACTERIZATION	MIXTURE
ODOR	CHARACTERISTIC



STORAGE:

KEEP IN A WELL-VENTILATED PLACE, AWAY FROM LIGHT AND HEAT.



COMPATIBILITY:

COMPATIBLE WITH NONIONIC, ANIONIC AND CATIONIC EMULSIONS, GELS, CREAM GELS AND LIQUID SOAPS, SHAMPOOS, CONDITIONERS, CAPILLARY FINALIZERS AND MASKS.



INCOMPATIBILITY:

ETHANOL AND OTHER ORGANIC SOLVENTS

References

- 1 LIU, L.; WANG, M.; SUN, J.; DU, G. C.; CHEN, J. Enhanced hyaluronic acid production by a two-stage culture strategy - based on the modeling of batch and fed-batch cultivation of Streptococcus zooepidemicus. Bioresourse Technology, v. 99, p. 1132-1136, 2008.
- $2-\mathsf{BERTOLAMI}, \mathsf{C.N.}; \mathsf{BERG}, \mathsf{S.}; \mathsf{MESSADI}, \mathsf{D.V.} \; \mathsf{Binding} \; \mathsf{and} \; \mathsf{internalization} \; \mathsf{of} \; \mathsf{hyaluronate} \; \mathsf{by} \; \mathsf{human} \; \mathsf{cutaneous} \; \mathsf{fibroblasts}. \; \mathsf{Matrix}, \mathsf{v.11}, \; \mathsf{p.} \; \mathsf{11-21}, \; \mathsf{1992}. \; \mathsf{1992}. \; \mathsf{v.11}, \; \mathsf{v.$
- 3 FRASER, J. R. E.; LAURENT, T. C.; LAURENT, U. B. G. Hyaluronan: its nature, distribution, functions and turnover. Journal of Internal Medicine, v. 242 n. 1, p. 27-33, 2007.
- $4 GUILLAUMIE, F.\ New sodium\ hyaluronate\ for\ skin\ moisturization\ and\ antiaging.\ Cosmetics\ 8\ Toiletries,\ v.\ 121,\ p.51-58,\ 2006.$
- $5 DRAELOS, Zoe\ Diana.\ Cosmetic\ Dermatology:\ Products\ and\ Procedures.\ Chichester:\ Blackwell\ Publishing,\ 2010.$



Nanovetores Encapsulation Technology



Multifunctional biopolymeric particles that increase the capillary adhesion and form a shielding film.



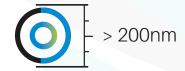
Enzymatic Specific Release Trigger, in which the enzymes present in our skin promote the degradation of the capsule, releasing the active ingredient.



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



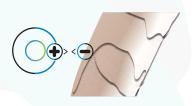
Monodispersity, that ensures control of the particle size, providing adequate permeation to its proposed action.



Secure particles larger than 200nm, biocompatible and biodegradable.



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

