



nano fresh



Refreshing Action

Active ingredient: Menthol and Menthol Lactate.

Nano Fresh is a blend of active ingredients encapsulated in lipid particles with particle diameter larger than 200nm. The blend encapsulation through the Nanovetores Technology allows the stabilization of sensitive components, therefore, complex of being formulated in its free form. The blend consists of Menthol and Methyl Lactate. Due to its natural features and non-existent chemical aggression, Nano Fresh can be used daily in different body, facial and hair applications, bringing a refreshing sensation.



Features

Aspect: Milky liquid from white to cream.

Usage Concentration: 0.5 to 5.0%

pH stability: 2.0 to 8.0

Solubility: Water Dispersible

Particle: Lipid

Release Trigger: Enzyme



Benefits

- Pleasant refreshing action
- Analgesic
- Relief of muscle pain and skin irritation.
- Antipruritic
- Activates peripheral circulation
- Astringent action
- Antioiliness action



Usage

Liquid soaps, shampoos, body and facial creams, deodorants and products for oily and acneic skins.

Description



Nano Fresh is a blend of active ingredients encapsulated in lipid nanoparticles, with an enzymatic release trigger. Acts as refreshing component in skin, hair and textile products. It can be used in topical products with analgesic focus to relieve muscle pain, itching, skin irritations and aid in the treatment of cellulite.



Menthol is a cyclic terpene alcohol found in many active forms, and L-menthol, isomer most commonly used in commercial products because it produces strong cooling effects. Menthol acts on the highly sensitive cold receptor TRPM8 (Transient Receptor Potential Melastatin 8), expressed in sensory C fibers and A-delta on the cell membrane of cutaneous sensory nerves. The TRPM8 channels are activated by moderately cold temperatures (8 - 27 ° C) and by cooling compounds like menthol that generate influx of Na⁺ and Ca²⁺ and membrane depolarization.



Menthyl lactate is a natural phytoactive derivative of menthol (menthol ester) obtained by the freezing of the volatile oils of various species of Mentha with cooling property. It provides, shortly after application, pleasant cooling effect, with subsequent rubefacient (light heating and moderate redness), because it acts on nerve endings and promotes activation in peripheral topical circulation, increasing blood flow in the area. It has astringent, anti-oiliness, antiseptic and analgesic action. Recommended for topical application in anti-cellulite treatments and for relief of muscle aches, sprains, dislocations and contusions.

Regulatory Information

INCI NAME	CAS NUMBER
AQUA	7732-18-5
DIPROPYLENE GLYCOL	110-98-5
OLEIC ACID	112-80-3
STEARIC ACID	57-11-4
MENTHOL	1490-04-6
MENTHYL LACTATE	59259-38-0
POLYSORBATE 80	9005-65-6
PPG-15 STEARYL ETHER	25231-21-4
STEARETH-2	9005-00-9
STEARETH-21	9005-00-9
PHENOXYETHANOL	122-99-6
CAPRYLYL GLYCOL	1117-86-8

Physical-chemical Information

PHYSICAL STATE	LIQUID
FORM	MILKY
COLOR	WHITE TO CREAM
ODOR	CHARACTERISTIC
pH	3.5 TO 5.5
SOLUBILITY	WATER DISPERSIBLE
RELATIVE DENSITY	0.8 TO 1.1 g/ML
CHEMICAL IDENTITY	ORGANIC
CHARACTERIZATION	BLEND

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

**As it is a suspension of nanoparticles, agitate before using.

Approved by International Regulations:



STORAGE:
KEEP AT ROOM TEMPERATURE, AROUND 25°C.

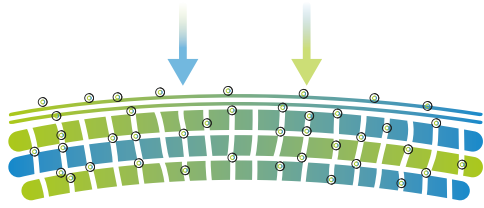


COMPATIBILITY:
EMULSIONS IN GENERAL, CREAMS, SHAMPOOS, LIQUID SOAPS.



INCOMPATIBILITY:
ETHANOL AND OTHER ORGANIC SOLVENTS.

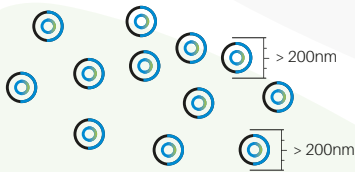
Nanovetores Encapsulation Technology



Multifunctional Lipid Particles that promote hydration and extended effect.



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, where enzymes present on the skin disintegrate particles, releasing the active ingredient specifically where it needs to act.

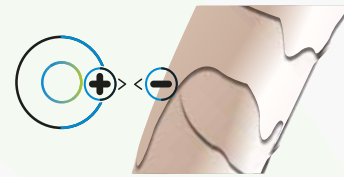


Active ingredient deposition when applied freely



Greater permeation of the active ingredient when encapsulated

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

Oclusion of odors

Increased skin permeation

Reduced dose

Use of sensitive active ingredients (without refrigeration)

Increased Solubility

Prolonged release

Increased effectiveness