

# nano hot



## Warming Sensorial

**Active Ingredients:** Vanillyl Butyl Ether.

**Nano Hot** is an active ingredient encapsulated in lipid particles with particle diameter larger than 200 nm. The active ingredient encapsulation through the Nanovetores Technology allows the stabilization of sensitive components, therefore, complex of being formulated, as well as promotes the sustained release of the active ingredient through the enzymatic trigger release. Due to its natural features and non-existent chemical aggression, Nano Hot can be used in different applications, bringing warming sensation to the skin.



### Features

**Aspect:** White to cream milky liquid  
**Usage Concentration:** 1,0 to 3,0%\*  
**pH stability:** 2,0 to 7,0  
**Solubility:** Water Dispersible  
**Particle:** Lipid  
**Release Trigger:** Enzymatic

\*The active concentration used must be adjusted according to each application. Glutes and legs require greater concentration as mucous and abdomen, more sensitive areas, require a lower concentration of the active on the formulated product.



### Benefits

- Warming sensorial



### Usage

- Sensory donor for cosmetic treatment products
- Spa Products
- Body lotions and creams.

# Description



Nano Hot is a unique sensorial active ingredient that promotes a warming sensation on the skin. When compared to other warming active ingredients, Nano Hot demonstrates advantages related to the traditionally used active ingredients. The product is less irritating than capsaicin and capsicum extract, for example.

The encapsulation technology from Nanovetores ensures greater stability for the active ingredient and extended release effect, allowing easy incorporation of the active ingredient in different formulations.



Nano Hot acts directly through the stimulation of receptors on nerve endings to produce a perception of warming to the user, without changing the actual skin temperature.

The nanoencapsulated active ingredient can be used to indicate benefits and as a sensory donor in cosmetic treatment products.

## Regulatory Information

## Physical-Chemical Information

INCI NAME	CAS NUMBER
AQUA	7732-18-5
VANILLYL BUTYL ETHER	82654-98-6
CAPRYLIC/CAPRIC TRIGLYCERIDE	73398-61-5
LAURIC ACID	143-07-7
PPG-15 STEARYL ETHER	25231-21-4
MYRISTIC ACID	544-63-8
STEARETH-2	9005-00-9
OLEIC ACID	112-80-1
STEARETH-21	9005-00-9
POLOXAMER 407	9003-11-6
PHENOXYETHANOL	122-99-6
CAPRYLYL GLYCOL	1117-86-8
BHT	128-37-0
DISODIUM EDTA	139-33-3
SODIUM METABISULFITE	7681-57-4

PHYSICAL STATE	LÍQUID
FORM	MILKY
COLOR	WHITE TO CREAM
ODOR	CHARACTERISTIC
pH	2,5 TO 4,5
SOLUBILITY	WATER DISPERSIBLE
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.

### Approved by International Regulations:



China - IECIC



Europa - EC Cosing



EUA - CIR



Australia - AICS Inventor



#### STORAGE:

KEEP AT ROOM TEMPERATURE, BETWEEN 20 - 25°C.



#### COMPATIBILITY:

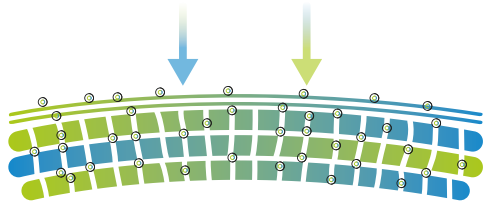
EMULSIONS IN GENERAL, CREAMS, GELS AND LOTIONS.



#### INCOMPATIBILITY:

ETHANOL AND OTHER ORGANIC SOLVENTS.

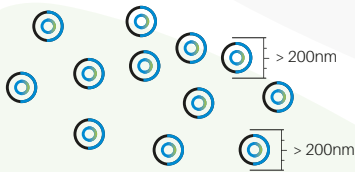
# Nanovetores Encapsulation Technology



**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.

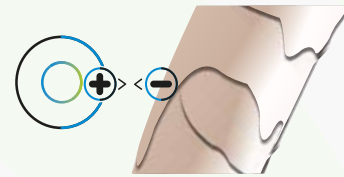


Active ingredient deposition when applied freely



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