

Nano Ladies



Active ingredients

Essential oil of sweet fennel (*Foeniculum vulgare*).

Description

Nano Ladies is an active ingredient based on sweet funnel essential oil encapsulated in lipid nanoparticles (VAM® – Multifunctional Active Vectors) with an enzymatic release trigger. It has a prolonged release, releasing about 80% of its contents gradually over a period of 8 hours after product application.

The active ingredient encapsulation through the VAM® Technology allows the stabilization of extremely sensitive components, therefore, complex of being formulated. It also grants the active ingredient an increase in the cutaneous permeation, increment of sensory input in the end product, and presents as multifunctionality high moisturizing properties, since it operates in the lipid parts and prevents water loss through evaporation.

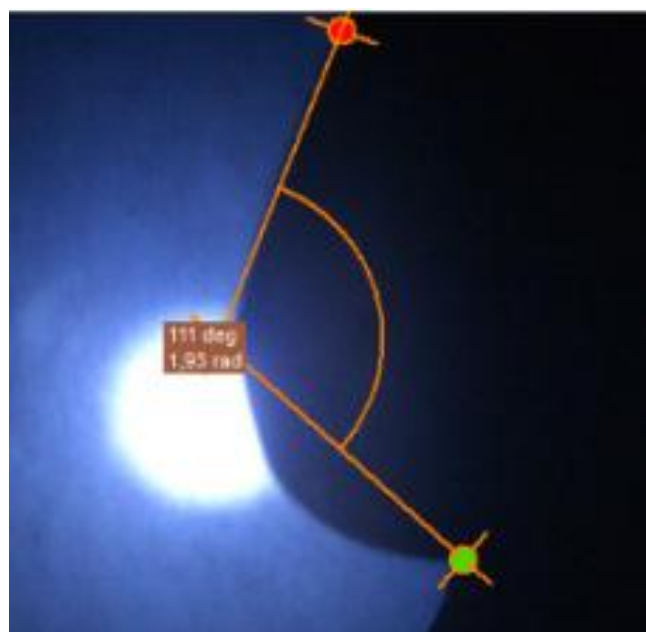
Nano Ladies works on firming the breasts, stimulating collagen synthesis and has estrogen-like action (breast augmentation).

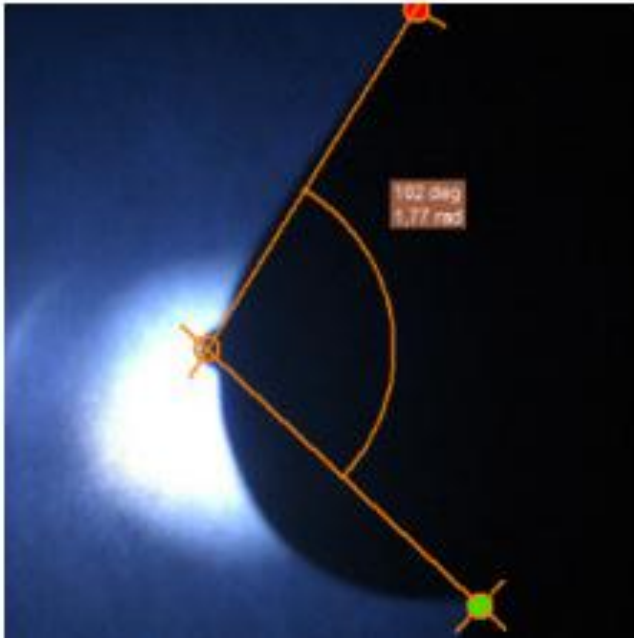
The essential oil of sweet fennel has proven firming action on the skin, stimulating collagen synthesis, and presents anti-inflammatory (CHOI; HWANG, 2004) and anti-hirsutism properties (JAVIDNIA et al., 2003). This essential oil is composed mainly of trans-anethole, alpha-pinene, limonene, methyl chavicol (= estragole) (MIGUEL et al., 2006). A study that evaluated the effect of topical application of estrogen in

postmenopausal women, Patriarch et al. (2007) proved at the end of 16 weeks increased thickness of dermis and epidermis, as well as a significant increase in the amount of collagen. Some of the sweet fennel essential oil components have estrogen-like action as they present similarity among the chemical structures (JAVIDNIA et al., 2003), and this feature gives this oil skin firming activity, and it can be applied to anti-wrinkle products as well as body and bust firming products.

*VAM® Lipid and biopolymer particles of natural origin, biocompatible and biodegradable, produced in a water medium, aggregating multifunctionality to the active ingredients and with specific release triggers (Nanovetores® Patented Technology)

Clinical effectiveness





Increased girth in 55% of volunteers

Reduction of breast angle shows increase of the breast firmness.

Source: Nanovetores - Study conducted on 20 volunteers aged between 19 and 65 years old for 28 days using beautifying breast cream with 10% of Nano Ladies - twice a day.

Technical information

INCI NAME: AQUA, HYDROXIPROPYL GUAR, FOENICULUM VULGARE OIL, NASTURTIUM OFFICINALE EXTRACT, TOCOPHERYL ACETATE, POLYSORBATE 80, CAPRYLYL GLYCOL, PHENOXYETHANOL.

Aspect: stable milky suspension at room temperature (25 ° C).

Usage Concentration: 1 to 10%

pH stability: 3.0 to 7.0.

Solubility: Water Dispersible.

How to use: Shake before use and add the formulation below 40 ° C.

Storage: Keep in a temperature between 20 – 25 degrees Celsius.

Compatibility: Compatible with gel-cream and emulsions in general.

Incompatibility: Ethanol.

References

CHOI, E.M; HWANG, J.K. Antiinflammatory, analgesic and antioxidant activities of the fruit of *Foeniculum vulgare*. *Fitoterapia*. 75: 557– 565, 2004.

JAVIDNIA, K. et al. Antihirsutism activity of Fennel (fruits of *Foeniculum vulgare*) extract A double-blind placebo controlled study. *Phytomedicine*. 10: 455–458, 2003.

MIGUEL, M. G. et al. *Foeniculum vulgare* essential oils: chemical composition, antioxidant and antimicrobial activities. *Natural Product Communication*. 5: 319-28, 2010.

PATRIARCA, M. T. et al. Effects of topical estradiol on the facial skin collagen of postmenopausal women under oral hormone therapy: A pilot study. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 130: 202–205, 2007.