



NATURA-TEC SEAPASSION™ A powerful acne genesis Repressor

PROPERTIES

NATURA-TEC SEAPASSION™ is the result of advanced research and careful development based on sustainable microalgae technology using eco-friendly industrial production processes.

PASSION FRUIT OIL or "Maracujá", contains high amount of unsaturated fatty acids such as linoleic acid - $\Omega 6$ which is essential in normal sebum composition but deficient in acneic skin.

HEMP SEED OIL has been described as "Nature's most perfectly balanced oil", since it offers the perfect 4:1 ratio of $\Omega 6$ (Linoleic) and $\Omega 3$ (α -Linolenic) essential fatty acids. The latter is a major anti acne player thanks to its anti-inflammatory activity recognized since decades.

PAVLOVA LUTHERI microalgae species takes its name from the shape of its cell with two characteristic flagellums and inspired by the famous Russian ballerina Anna Pavlova. This particular species was selected due to its high content in $\Omega 3$, long chain EPA and DHA fatty acids improving skin protective barrier, fighting inflammation and its ability to regulate the sebaceous lipogenesis.

Combining the effectiveness of Pavlova Lutheri microalgae, the virtues of a super fruit linked to the richness of hemp, **NATURA-TEC SEAPASSION™** fights against inflammation, lipid synthesis dysfunction in skin disorders such as acne vulgaris. This optimised and concentrated infusion modulates the activity of the Forkhead Box O1 (FoxO1) protein, a key regulator of acne. FoxO1 is a nuclear transcription factor known to be a repressor of the key genes of acne.

An **increased FoxO1 protein in the nucleus** is a reliable indicator of its power to inhibit acne pathogenesis, thus inhibiting inflammation, hyperkeratosis, and overproduction of lipid.

The Ex-Vivo test results (on human skin explants) show that **after 96h, NATURA-TEC SEAPASSION™ at 2% is able to significantly increase the quantity of the FoxO1 protein by 32% in the nuclei of the cells: NATURA-TEC SEAPASSION™** up regulates FoxO1 nuclear concentration leading to a repression of genes involved in acne pathogenesis.

The In-Vivo test results prove that **NATURA-TEC SEAPASSION™** is efficient on both acne related to puberty and hormones and acne related to stress and dietary habits.

After 2 months, NATURA-TEC SEAPASSION™ (used at 2% in a cream) has an excellent beneficial impact on acne:

- area of acne lesions are reduced by 23,7%**
- perimeter of acne lesions are reduced by 26,2% ****
- height of acne lesions are reduced by 15,0%*
- number of acne lesions are reduced by 20,7%***

NATURA-TEC SEAPASSION™ is an **excellent repressor of acne genesis.**

COSMETIC APPLICATIONS

Use : Introduce at the end of the formulation either in O/W or W/O system during the cooling step.

Dosage : From 2% to 4% in all type of formulations and particularly in acne treatments.

TECHNICAL DATA

Appearance: Light Yellow to Yellow

INCI : Hydrogenated EthylhexylOlivate (and) Passiflora Edulis Seed Oil (and) Cannabis Sativa Seed Oil (and) Pavlova Lutheri Extract