



NATURA-TEC SEABERRY BLUE
Booster of skin natural protection

PROPERTIES

Naturally, the skin protects itself by producing significant amounts of antioxidants. However, in the event of prolonged exposure to UV or blue light, the increasing production of reactive oxygen species induces oxidative stress responsible for skin aging due to an alteration of the circadian rhythm of the skin and the lack of time for it to regenerate overnight.

In this case, the green microalgae *Haematococcus Pluvialis*, the most important source of asthaxanthin, which is a very powerful carotenoid, associated with cranberry seed oil, a super fruit rich in antioxidants and sterols, will work in symbiosis with combined effects for a targeted action of protection of the skin against environmental stress, including high energy radiation sources.

NATURA-TEC SEABERRY BLUE active has the ability to intrinsically strengthen the skin's natural antioxidant defenses against excessive exposure to UV radiation and blue light. The antioxidant system will help rebalance our circadian rhythm and even support the synchronization of our biological clock for the improvement of our well-being.

Due to inevitable consequences of modern life, humans are not exposed to adequate levels of natural light during the day, but they are overexposed to relatively high levels of artificial light at night. Recent studies demonstrated that blue light decreases period-protein transcription in keratinocytes. Blue lights trigger cells to "think" it is daytime even at night-time, leading to a perturbation of the natural repairing process of the skin.

Ex-vivo test measures the effect of **NATURA-TEC SEABERRY BLUE** on skin antioxidant production under UV (A+B) and blue light radiation in human skin explant. Under conditions of stress generated by blue light, **2% of NATURA-TEC SEABERRY BLUE is able to stimulate the synthesis of antioxidants by 28% and under stress generated by UVA and UVB this will increase by 42%.**

In vivo test measures the Minimal Erythema Dose (MED) under UV stress after application of a sunscreen formulation of SPF 20 (chemical filters) with or without **NATURA-TEC SEA BERRY BLEUE**. **2 % of NATURA-TEC SEABERRY BLUE increases the SPF of the cream initially at 20 to 25 and up to 26,34 with 4%.**

Due to its unique composition, **NATURA-TEC SEABERRY BLUE** has the ability to **increase the concentration of skin antioxidants, when subjected to stress by UVA, UVB or blue light exposure through biomimetic pathway.**

NATURA-TEC SEABERRY is an effective SPF booster by increasing SPF of a cream

NATURA-TEC SEABERRY BLUE can boost skin natural protection against environmental aggressions.

COSMETIC APPLICATIONS

Dosage: 2% in skin care product
Applications: anti-aging, anti-inflammatory, UV protection (SPF booster), moisturizing, and hair conditioning products

TECHNICAL DATA

Appearance: Amber to brown orange
INCI: Triolein (and) Vaccinium Macrocarpon Seed Oil (and) *Haematococcus Pluvialis* Extract