



NATURA-TEC MARINE OCEANMIST CL™ Repairing & microbiota-balancing active for sensitive skin

PROPERTIES

Sterols are vital components of all eukaryotic cells. They play a structural role in cell viability, embryogenesis, cell division, chloroplast biogenesis, modulation of activity and distribution of membrane-bound proteins etc. Cholesterol is normally a minor component of the overall sterol profile (0% to 5%).

Nannochloropsis Oceanica, isolated in Norway, has an extremely high cholesterol content (>70% total sterol).

Nannochloropsis Oceanica is the very first substantial source of cholesterol from microalgae.

In the stratum corneum of the skin, cholesterol is located in the hydrophobic extracellular lipid matrix and plasma membrane of corneocytes providing the principal barrier to the transcutaneous movement of water, electrolytes or microbes.

Nannochloropsis Oceanica adds another layer of diversity to sterol biosynthesis.

Lu et al. *Biotechnology for Biofuels* 2014 7:81
<https://doi.org/10.1186/1754-6834-7-81>

NATURA-TEC MARINE OCEANMIST CL™ plays a major role in repairing and boosting barrier function thanks to the phytocholesterol action to rebuild the fundamental extracellular lamellar matrix. **NATURA-TEC MARINE OCEANMIST CL™** presents an excellent tolerance on baby skin, thanks to a biocompatible composition, perfectly suitable for delicate skin, improving health and condition. In addition, on dry and sensitive skin, **NATURA-TEC MARINE OCEANMIST CL™** restores a normal skin type generating a healthier skin microbiota.

On 3D model of atopic skin (AS), Filaggrin (FLG), a major structural protein, decreases by more than 50% and Involucrin (INV), a structural protein of corneocyte cornified envelope, decreases by more than 60%. After 48h, **at 5%, NATURA-TEC MARINE OCEANMIST CL™ increases FLG levels up to 72% restoring cellular pH, hydration, water transport and retention. 5% of NATURA-TEC MARINE OCEANMIST CL™ also increases INV levels up to 169%, re-structuring the cornified envelope in order to rebuild a strong barrier.** On 3D model of sensitive skin, **NATURA-TEC MARINE OCEANMIST CL™** protects skin against epidermal barrier disruption and morphological changes induced by a chronic inflammation.

Moreover, an In vivo evaluation of the face skin microbiota, upon 14 days, with 3% of **NATURA-TEC MARINE OCEANMIST CL™**, compared to the placebo formulation, on a selected panel of very dry and sensitive skin, demonstrated that **NATURA-TEC MARINE OCEANMIST CL™ has excellent microbiota-balancing and nourishing properties on dry skin, as levels of both aerobic and anaerobic microbiota are highly increased, without disturbing the individual microbiome.**

NATURA-TEC MARINE OCEANMIST CL™ induces an excellent cell viability and is considered as a non-inflammatory ingredient on baby skin. In sensitive and dry skin, **NATURA-TEC MARINE OCEANMIST CL™** counteracts negative effects of inflammatory responses, restores homeostasis, reduces skin alterations, promoting skin health conditions. Moreover, it provides excellent microbiota-balancing properties. **NATURA-TEC MARINE OCEANMIST CL™** is the ideal solution for delicate skin.

COSMETIC APPLICATIONS

Dosage : From 0,5 to 5% in skin care or hair care applications.

Applications : Repairing treatments, daily/night creams, anti-ageing and moisturizing creams, body creams, sensitive and dry skin care, baby care.

TECHNICAL DATA

Appearance: Yellow to orange liquid

INCI : Caprylic/Capric Triglyceride (and) Nannochloropsis Oceanica Extract