



## NATURA-TEC CRYSTALROSE

### Ageing cycle disruptor - Longevity care

### PROPERTIES

As cells become less active with age, the immune system can no longer provide protection against internal and external irritants responsible for premature ageing. The skin's reactivity to inflammatory stress weakens with defective inflammation resolution regulation, leading to the development of a low-level, systemic, chronic inflammation known as "inflamm'ageing".

**NATURA-TEC CRYSTALROSE** is a biomimetic active ingredient that stimulates and reinforces the endogenous production of mediators, capable of deactivating chronic inflammation to prevent and limit skin ageing and its consequences, induced by intrinsic and extrinsic factors collectively referred to as the exposome.

**NATURA-TEC CRYSTALROSE** helps minimize the signs of ageing thanks to very effective active molecules obtained from the association of the power of flowers with the sustainable and virtuous microalgae which stimulate specific mediators, helping skin tissues to regain vitality, radiance and firmness quickly and long term.

**NATURA-TEC CRYSTALROSE** is an infusion of Evening Primrose Seed Oil with Haematococcus Pluvialis extract that delivered high concentration of omega 3, including the long chain EPA, omega 6 and 9 with asthaxanthin molecules that work in synergies against cellular senescence.

With ageing, under the influence of environmental factors (UV, pollution, smoking and diet, and alongside intrinsic factors) and the accumulation of senescent cells, cellular damage and stress increase while resolution of inflammation and repair abilities decrease leading to a chronic inflammatory environment remodeling the extracellular matrix inducing structural and functional alterations.

Demonstrated ex-vivo, **NATURA-TEC CRYSTALROSE** stimulates the endogenous capacities of the skin to reduce the mediator of inflammation as well as produce mediators of the resolution of the inflammation.

After inducing an inflammatory context by stimulating skin explants with Phorbol 12-myristate 13-acetate (PMA), an analysis of the 25 lipid mediators involved in inflammation process is performed by LC-MS/MS.

These lipidic metabolites derive from 3 long chain fatty acids : 1st the omega 6 arachidonic acid (AA), mainly involved at the acute inflammation stage, then the omega 3 Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) acting at the resolution stage.

From 2% to 5%, **NATURA-TEC CRYSTALROSE** inhibits the pro-inflammatory mediators as well as stimulates the resolution pathway with a dose dependant effect especially on EPA pathway with a significant increase of the mediators of the Resolvin family.

Sum AA metabolites (pro-inflammatory mediators) : decrease by 150%

Sum EPA metabolites (resolution mediators) : increase by 200%

Sum DHA metabolites (resolution mediators) : increase by 150%

**NATURA-TEC CRYSTALROSE** protects the skin against oxidative stress and acts on pro-inflammatory and anti-inflammatory cytokines in a combined way for an optimized effect.

### COSMETIC APPLICATIONS

Advise for use: 0,5% - 5% in skin care.

Applications: Skincare Anti-ageing, anti-wrinkle treatments (skin densifier, collagen booster, skin elasticity enhancer), lightening activity, day and night creams

### TECHNICAL DATA

Appearance: Amber to brown-orange liquid  
INCI: Triolein (and) Oenothera Biennis (Evening Primrose) Oil (and) Haematococcus Pluvialis Oil