

Nano Retinaldehyde (Retinal) Nanoemulsion



Retinal acts 11 times faster than Retinol and is stored in the skin.

The smaller the particle size, the deeper the penetration and the higher the efficacy.

NanoRetinaldehyde is a stable liposomal Nanoemulsion

Science

The technique of nano liposomal encapsulation of cosmetic active ingredients is performed with phospholipids.

Our Nanoliposomes do have an approximate particle size of less than 30 nm and are supplied as Nanoemulsions. The poorly water soluble, easily oxidized and not light stable Retinal is encapsulated and protected by the liposomes and is now stable and suitable for oil and water systems.

The phospholipids interact with the surface of the stratum corneum being involved in the process of skin formation and skin renewal.

Having a very small size the Nanoliposomes are transported deep into the skin where the active is then released and becomes fully effective.

Retinaldehyde (Retinal)

Retinaldehyde is the most powerful Vitamin A derivative which can be used in prescription free products and is only one step away from retinoic acid. (whereas Retinol is 2 steps away)

Effects on the skin

Retinal stimulates collagen production, thickens the inner layer of the skin, speeds cell turnover, keeps pores clean and balances oil production.

Uses

Retinal is used in anti-aging, anti-wrinkle, anti-acne, skin rejuvenation, skin lightening, skin depigmentation.

Recommended Usage Rate:

0.05 – 0.1% Retinal in the formulation.

Chemical Details

Retinaldehyde – other names: Retinene, Vitamin A aldehyde, RAL

INCI: RETINAL

CAS: 116-31-4

Appearance: Yellow, viscous and transparent emulsion

pH: 5.0-8.0

Origin: Synthetic

Content of Retinaldehyde: 5%

Formulation to be packed in opaque packaging to avoid degradation

Formulation advantages:

- Can be formulated in the water or the oil phase
- Heat stable up to 40°C
- pH and shearforce tolerant
- best added at the end of the formula

Logistics

Packaging: 1kg, 5kg, 25kg

Storage: in a dark and cool place (<25°C)

Origin: China

Manufactured by HRZ Rebtech