Elixi-ACT CER 50

Encapsulated Ceramides NP

INCI: Ceramide NP, Hydrogenated lecithin

Ceramides are an essential part of the **cutaneous barrier**. With age and external aggression, their quantity diminishes, giving way to problems such as loss of elasticity, dry skin and even the appearance of wrinkles. It is **essential** to create an **external supply** for the skin to fill the gaps.

Well-documented in terms of efficacy, the only problem with **ceramides** is their application. They are virtually insoluble in water, and their very high melting point makes their use extremely **complicated**. This encapsulation technology is the **answer** to easy, high-percentage formulation of ceramides.

Advantages at a glance

NATRUE APPROVED COSMOS APPROVED

High ceramide content

50% of Ceramide NP (Ceramide III)
Unlike other encapsulation system, our ingredient contains high percentage of ceramides

Easy to process

Powder form
Soluble in main diols commonly used in cosmetics
Possible to use in aqueous formulations
No recrystallisation risk

Minimalist composition

Clean INCI composition
Only ceramide and hydrogenated lecithin
No influence of fatty acids or other emulsifiers to destabilize the final formulation

Encapsulation technology

To achieve the desired performance and ease to use, the surface of ceramides is activated by a mechanochemical process. Hydrogenated lecithin is then applied to the surface of the activated ceramides. No recrystallisation and much easier dispersion in commonly use solvents like diols, water or glycerin.

Easy to process: solubility

Ceramide NP have very low solubility in water and a high melting point. Their use in aqueous formulations is complicated.

Ceramide NP and hydrogenated lecithin are easy to process as they are soluble in main diols that are used in cosmetics.

Figure 1 : Easy dissolution of encapsulated ceramides in octanediol (cold process)

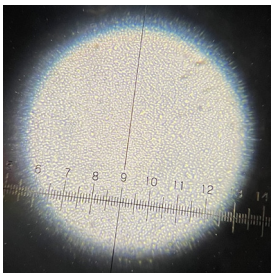

Figure 2 : Microscopy picture illustrating no recrystallisation of ceramides included in formulation even if stored at 6°C

Long term stability

Due to the low solubiilty and high melting point, Ceramide NP not encapsulated tend to recrystallise within final formulations.

Thanks to our technology of coating with hydrogenated lecithin you can achieve a long term stability in your products.

Ingredient characteristics:

Appearance: White powder

Composition: 50% Ceramide NP
50% Hydrogenated lecithin

Origin: Natural (biotechnology & plant)

INCI: Ceramide NP, Hydrogenated lecithin

Formulation example

Aqueous serum with Ceramide

Phase	Product / INCI Name	% (w/w)
A	Water	90.25
B	**Xanthan gum**[1]	0.40
	Sodium hyaluronate (MW 1.5-2.0 MDa)[1]	0.30
	Sodium hyaluronate (MW 0.4-0.8 MDa)[1]	0.20
C	**Elixi-CARE BG**[1] / Butylene glycol	5.00
	Elixi-ACT CER 50 / Ceramide NP, Hydrogenated lecithin[1]	0.05
D	**Elixi-KON PSB**[1] / Potassium sorbate, Sodium benzoate, Aqua	1.00
E	**Glycolic acid**[1] **(70%)**	2.8

Suppliers: [1]Connect Chemicals

Use of the ingredient :

0.1-0.5 % as claim support

0.5-5.0 % as barrier enhancer

3.0-10.0 % as anti-aging

Application

- Aqueous formulations
- Dermatological products
- Serums
- Creams for sensitive skin