



Ceramide complex acting by
biomimicry deep in skin.

CERALINK+[®]

[Skin barrier
restructuring]



*Build a barrier
for sensitive skin!*



CONTEXT

On the front line to face external world, **the epidermis made up different cell layers, forming a protective barrier.** The upper one/ layer, the *stratum corneum*, is mainly made up of dead cells, the corneocytes. These are separated by a lipidic matrix organized in multilamellar layers called intercorneocyte space. **Particularly rich in ceramides, it enables the cohesion of several cutaneous components, thus limiting the dehydration and protecting the skin from environmental stress.**

Several causes such as age, repeated aggressions or some pathologies (atopic dermatitis) can be at the root of a reduction of the ceramide quality and quantity in the skin. **This modification of the intercorneocyte space will lead to an increase of skin barrier permeability** that favors water loss and the entry of aggressors. Consequently weakened, the skin becomes more sensitive to redness, tingling and tightness feelings. **Nowadays, the understanding of these phenomenon enables the development of suitable solutions aiming for the increase of the *stratum corneum* cells cohesion to improve the skin barrier function.**



DEFINITION

CERALINK+® is a unique complex combining a Ceramide 3 and a ceramide analog. Omega 6 safflower is obtained by a patented process of enzymatic synthesis solvent-free obtained from a vegetable safflower oil.

SAFFLOWER, AN AYURVEDIC BEAUTY RITUAL

Safflower (*Carthamus tinctorius*) belongs to the *Carthamus* type that includes about fifteen species. Native to the Middle East, this plant was cultivated for a long time for its dyeing qualities. It gives clothing and food yellow-orange hues, similar to those of saffron, but its aroma is far from it. Growing in dry areas, safflower has an impressive physiology. Indeed, it has a **2 meters deep root allowing it to draw far away the water and nutrients necessary for its growth.** Used since Antiquity for its **anti-inflammatory properties**, this plant is a well-being source in the Indian tradition. Its flower is notably at the **heart of traditional Ayurvedic beauty rituals** since its relaxing oil is used in massage to soothe body and mind. Among all vegetable oils, safflower oil is one of **the richest in linoleic acid with a content up to 80%.**



LINOLEIC ACID, AN ESSENTIAL FATTY ACID

Linoleic acid is an «essential» polyunsaturated fatty acid, that our body is not able to synthesize. Present at the level of epidermis lipids, it is used in particular in the synthesis of ceramides in our skin. Thus, this Omega 6 guarantees the functionality of the *stratum corneum* as it is necessary for its elasticity, suppleness and hydration. **However, like many active molecules, linoleic acid is very sensitive to oxidation and therefore quickly loses its properties.**

OMEGA CERAMIDE® TECHNOLOGY

Coming from the Solabia Goup research, the Omega Ceramide® technology is a patented enzymatic synthesis process solvent-free. It results in the formation of a biomimetic structure of the ceramides in our skin and has many benefits:

- **Stabilization of polyunsaturated fatty acids such as linoleic acid**
- Optimization of skin penetration thanks to a «ceramide-like» structure
- Vectorization of biological compounds within the skin

ADDITIONAL INFORMATION

INCI name: Safflower oil/ Palm oil aminopropanediol esters (and) Ceramide 3

CTFA name: Safflower oil/ Palm oil aminopropanediol esters (and) Ceramide NP

Preservative: none

Regulations: Authorized for use in EU, USA, Japan, China (IECIC) and under conditions in Canada and Australia

APPLICATIONS

Recommended dose: 0.25 - 0.5%

Preventive and curative anti-aging care

Restructuring care

Moisturizing care

Soothing care

Day and night care

FORMULATION

pH stability: 4.0 to 8.0

Soluble at 10% and at 60°C in vegetable oils, mineral oils, caprylic / capric triglyceride

Thermostability: For cold process, melt in a small part of the fatty phase at 60°C, then incorporate into the rest of the fatty phase before preparing the emulsion. For hot process, incorporate in the fatty phase at the end of heating before preparing the emulsion.

Formulation example:

INFUSION NIGHT CREAM
ref. : 0581903/12
NIGHT CREAM

	INGREDIENTS	INCI name	%
A	TEGOSOFT OER (EVONIK)	<i>Oleyl erucate</i>	3.00
	PASSION FRUIT OIL (SOLABIA GROUP)	<i>Passiflora edulis (Maracuja) seed oil</i>	2.00
	DUB SIS 16 (STEARINERIE DUBOIS)	<i>Isocetyl stearate</i>	4.00
	ISOLAN GPS (EVONIK)	<i>Polyglyceryl-4 diisostearate / Polyhydroxystearate / Sebacate</i>	3.00
B	DUB ISIS (STEARINERIE DUBOIS)	<i>Isostearyl isostearate</i>	3.00
	CETIOL CC (BASF)	<i>Dicaprylyl carbonate</i>	2.00
	CERALINK+® (SOLABIA GROUP)	<i>Safflower oil / Palm oil aminopropanediol esters / Ceramide 3</i>	0.50
C	DEMINEALIZED WATER	<i>Aqua (Water)</i>	Qsp 100
	GLYCERIN	<i>Glycerin</i>	3.00
	PRESERVATIVES	/	Qsp
	MAGNESIUM SULFATE, 7H2O	<i>Magnesium sulfate</i>	1.50
	GLYCEROLAT® OF WHITE TEA (SOLABIA GROUP)	<i>Glycerin / Aqua (Water) / Camellia sinensis (leaf) extract</i>	2.00
	FUCOGEL® POWDER (SOLABIA GROUP)	<i>Maltodextrin / Biosaccharide gum-1</i>	0.30

Contact Us

www.solabia.com

SOLABIA GROUP

FRANCE

+33 1 48 10 19 40

SOLABIA USA

UNITED-STATES

+1 212 847 2397

SOLABIA BIOTECNOLOGICA

BRAZIL

+55 44 3260 8000

SOLABIA GmbH

GERMANY

+49 681 99 63 606

cosmetics
Solabia
group