

Natural
Vegetable
Functional

The Lipid Expert!

Lipex® Omega EPO

- Stabilised Evening Primrose Oil blend for stressed skin conditions
- Easily incorporated into your formulation
- Gamma-linolenic acid and natural vitamin E for intensive skin relief

Product name

Lipex® Omega EPO

INCI name

Olus Oil (and) Oenothera Biennis Oil (EU)

Vegetable Oil (and) Oenothera Biennis (Evening Primrose) Oil (US)

Physical form/Consistency at 20 °C

Triglycerides/Liquid

Regulatory Status

CTFA

Recommended use levels

Emulsions 5-10 %

Anhydrous products 5-20 %

Packaging

Drum 185 kg, can 9 kg

Product Data Sheet/Article number

8629

Formulations

TL-07-08, Body Cream Anti-age

with Lipex® Omega EPO

TL-07-26, Rich Body Lotion

with Lipex® Omega EPO

August 2008

Functionality and benefits

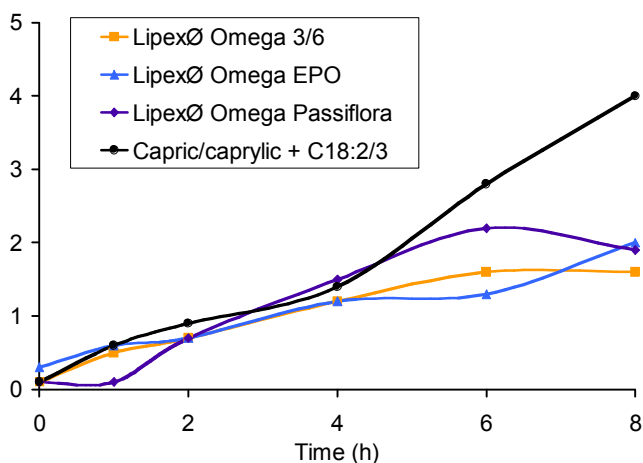
Lipex® Omega EPO is a vegetable oil blend containing omega-6 fatty acids, mainly from evening primrose. In evening primrose oil, the omega-6 fatty acids are composed of both linoleic and gamma-linolenic acids. In skin, linoleic acid is primarily found within the more complex skin lipids such as ceramides and cholesterol, where it helps in maintaining the epidermal water barrier. Gamma-linolenic acid is a metabolite of linoleic acid, which is deficient in skin suffering from atopic dermatitis. Topical application of gamma-linolenic acid from Lipex® Omega EPO will relieve symptoms of chronic dry skin and dermatitis and the linoleic acid will help reduce the water loss through the skin epidermis, further improving these conditions.

One problem with oils rich in polyunsaturated fatty acids is their limited oxidation stability. With the Lipex® Omega range we have addressed this problem by developing a line of oils that optimise the amount of polyunsaturated fatty acids with respect to oxidative stability. This has been obtained by the use of oils with high levels of natural antioxidants, in particular tocopherols. As a consequence, it is possible to formulate a product with a longer shelf-life. In comparison, an oil based on capric/caprylic triglycerides with the same content of polyunsaturated fatty acids oxidises twice as fast as a Lipex® Omega oil when exposed to UV light (figure 1). Oxidation stability tests at elevated temperatures show a stability increase of 33 % for the Lipex® Omega oils compared with the capric/caprylic oil mixture.

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Figure 1: Increase in peroxide value of samples irradiated by low intensity UVA at 35°C with free access to air.



Applications

Lipex® Omega EPO can be used as an emollient and moisturizer in all types of skin care creams and lotions on its own or in combination with other emollients. The inclusion of gamma-linolenic acid in combination with the high stability makes it particularly suitable for stressed skin conditions, such as atopic dermatitis and dry skin. These skin types benefit further from the natural vitamin E that is present in the oil.

The properties of this oil also mean that Lipex® Omega EPO is easily incorporated into a formulation. It has already been stabilised in an optimised oil blend, which eliminates one step in the formulation process and simplifies product handling.