

OLIVEM® 1000 Biomimetic multifunctional self-emulsifier



OLIVEM® 1000

Olivem[®] 1000 is a PEG-free, naturally derived, self-emulsifying ingredient designed for oil-in-water systems. Drawing from Hallstar's deep expertise in olive oil chemistry, Olivem[®] 1000 is derived from a complex combination of fatty acids that are chemically similar to the composition of the hydrolipidic film of the skin. Olivem[®] 1000 has the ability to generate liquid crystal structures, making it an ideal biomimetic ingredient in terms of composition and structure for use in a very wide range of applications.

TECHNICAL DATA

- INCI: Cetearyl Olivate, Sorbitan Olivate
- Ivory flakes
- Recommended dosage level: 3-5% as sole emulsifier
- pH of stability: 4.5-8.0
- Compatible with all preservatives
- Esters and lipids with a polar chain facilitate the liquid crystals formation



KEY REGULATORY INFORMATION



A BIOMIMETIC INGREDIENT

Olivem[®] 1000 is designed to mimic the physiological processes and chemical composition of human skin for complete skin affinity and maximum performance.



Liquid crystal structures mimic the skin lamellar bilayer lipids

EASY-TO-USE FORMULATION BASE

The versatile Olivem[®] 1000 can create gels with water and/or humectants.

Phase	INCI Name	% Wt	Function		
A	Water (Aqua) (deionized) Glycerin	up to 100 2.00	Volatile Carrier Humectant		
В	Olivem [®] 1000	2.00-7.00	Self-Emulsifier/ Liquid Crystal Maker		
	Sweet Almond Oil	10.00	Emollient		
С	Preservative	a.n.	Preservative		

Glycolic anhydrous gel formation at 5% with:

Glycerin

Propylene Glycol



Olivem® 1000 can be added into the water phase or into the oil phase to create emulsions.

Phase	INCI Name	% Wt	Function	14000	Internal Phase Quality with 5% Olivem [®] 1000				
A	Water (Aqua) (deionized) Glycerin	up to 100 2.00	Volatile Carrier Humectant	12000 (a) 10000					
В	Olivem [®] 1000	5.00	Self-Emulsifier/ Liquid Crystal Maker	Aiso 2000 Aiso 2000 Autor 4000					
	Sweet Almond Oil	5.00-20.00	Emollient	2000 0					
С	Preservative	a.n.	Preservative		5 t24h	10 Sweet Alm	15 nond Oil (%)	20	

SENSORIAL VERSATILITY

Olivem[®] 1000 can produce different sensorial effects depending on whether it is added into the oil phase or into the water phase. If added into the oil phase, it produces a richer feel and a faster absorption than if added into the water phase.



CLINICALLY-PROVEN DELIVERY OF ACTIVE INGREDIENTS

Acts as a carrier of caffeine into the epidermis and promotes the delivery of water-soluble active ingredients



REPARATIVE EFFECT

5% Olivem[®] 1000 in water demonstrates soothing, reparatory and regenerating activity on keratinocytes.

Skin equivalent (reconstituted human epidermis)



IMPACT OF OLIVEM® 1000 ON SKIN'S CUTANEOUS MICROBIOTA

To evaluate the impact of Olivem® 1000 on cutaneous microbiota after eight days of repeated applications, Hallstar conducted an in vivo metagenomic study.

- Tested dose: Olivem[®] 1000 formulated at 5%
- Panel: 22 Caucasian female subjects aged from 20 to 40 years old and presenting with a normal and healthy skin on the inner forearms
- Application protocol:
 - D-1 morning: last cleansing of forearms with usual cleanser and no other product application until D0
 - From D0 morning to D7 evening: application of a standard amount of formula with 5% Olivem® 1000 on forearms in place of usual skincare product, twice a day (after showering, if applicable); volunteers continue to use their usual cleanser during this period (maximum twice a day)
 - D8 morning: last cleansing of forearms with usual cleanser and no other product application until D9
- Skin microbiota is analyzed at D0 (before the first application) and D9 with measurements of: .
 - Semi-quantitative bacterial composition (relative abundance) through 16S-rDNA metagenomic approach
 - Shannon index (microbiota diversity)

Semi-quantitative bacterial composition: relative abundance



At both the phylum level and genus-species level, no significant change is observed at D9 compared to D0 in terms of cutaneous bacterial composition. The global picture is very stable.



