# ALULA PEREGRINAT CERAMOIL



A light, fast-absorbing oil enriched with ceramides, delivering deep hydration, intensive nourishment, and clinically proven soothing and brightening effects — all while offering patented benefits for visibly denser, fuller hair.



Odorless and remarkably stable, this lightweight oil absorbs quickly, delivering targeted nourishment with exceptional affinity for skin, hair, and scalp.

### COSMETIC BENEFITS

The AlUla Peregrina™ CeramOil is a light and dry oil with deep hydration and nourishing properties.

The Peregrina CeramOil has a neutral odor, is a fragrance booster, and is a long-term natural preservative.

18% increase in hair density after 56 days and a 30% increase after 84 days, significantly outperforming traditional solutions like Minoxidil.

### **KEY FEATURES**

The AlUla Peregrina™ CeramOil is liquid at room temperature.

The AlUla Peregrina™ CeramOil contains a unique fatty acid profile with several compounds of high biological interest. The oil is particularly rich in oleic acid (70-75%) which enables excellent skin penetration, while containing gondoic acid (1.8-2.6%), a rare fatty acid in plants that closely matches human sebum composition. The balanced combination of saturated and unsaturated fatty acids provides optimal support for the skin barrier function, while the notable presence of behenic acid (3-4.5%) contributes to its hair conditioning properties.

Advanced lipidomic analysis has revealed a distinctive profile of bioactive lipids. The oil contains 100 ppm of ceramides. Most notably, it features a unique hexosylceramide signature that sets it apart and contributes to its exceptional moisture-retention properties.

The AlUla Peregrina™ CeramOil is also rich in unsaponifiable matter: around 0,45%, including β-sitosterol, stigmasterol, and squalene.

#### MECHANISMS OF ACTION

The AlUla Peregrina™ CeramOil exerts its efficacy via three core mechanisms:

- it reduces TBARS, thereby helping guard cells and lipids against oxidative stress;
- it moderates the inflammatory cascade through PLA2 inhibition, contributing to a pronounced soothing effect on the skin.
- it upregulates ZAG, a key factor in melanin regulation, which results in a more luminous and balanced complexion.

These synergistic actions position the oil as a potent, multifunctional active for comprehensive skincare benefits.

#### ORIGIN AND DESCRIPTION

Family Moringaceae

Renewable botanical origin Seeds Geographic origin AlUla, Saudi Arabia

**Extraction** Cold press

#### **REGULATORY DATA**

English name AlUla Peregrina™ CeramOil Inci Moringa peregrina seed oil

**CAS** 68956-68-3

**EINECS** 273-313-5

Natural ingredient Index 1 (ISO 16128)

Cosmos Approved

#### PHYSICOCHEMICAL CHARACTERISTICS

Form Liquid Color Light Yellow Odor Very light smell

#### COSMETIC USE

Dry oil / light oil phase

#### **KEY FEATURES**

Peregrina oil fatty acid profile

	Fatty acid	%
Saturated C14:0	Myristic acid	< 0.2
Saturated C16:0	Palmitic acid	8,5 - 10.5
Monounsaturated C16:1	Palmitoleic acid	1.7 - 3
Saturated C17:0	Margaric acid	< 0,2
Saturated C18:0	Stearic acid	4 - 6.5
Monounsaturated C18:1	Oleic acid	70 - 75
Polyunsaturated (ω6) C18:2	Linoleic acid	0.4 - 0.8
Saturated C20:0	Arachidic acid	2.3 - 3.5
Monounsaturated C20:1	Gadoleic (Gondoic) acid	1.8 - 2.6
Saturated C22:0	Behenic acid	3 - 4.5
Saturated C24:0	Lignoceric acid	0.5 - 1

#### LIPIDOMIC PROFILE

Contains 100 ppm of ceramides with 5 molecular species Contains a unique Cholesteryl Ester (CE 27:1/17:1) Features specific Hexosylceramide signature contributing to

Includes rare phosphatidate species

### SPECIFICATIONS

0,905 ≤ d ≤ 0,925 1,450 - 1480 Density at 20 °C Refractive index Solubility Liposoluble

#### FORMULATION DATA

Preservatives None

Use level in formula Between 3% to 25%

Solubility In any oil phase

**Incorporation method** Anytime in oil phase using a cold process,

after cooling at the end of hot process

Rancimat >10 years

Storage Unopened vial protected from light and temperature

Shelf life 36 months

#### TOXICOLOGY

Cutaneous patch test: non-irritating (concentration of 50%)

#### **BIOLOGICAL ACTIVITY**

#### Soothing effect

- Phospholipase A2 inhibition by 41.73% at a concentration of 3.0%

### A radiant complexion

Zinc-α2-glycoprotein increased by 50.70% at a concentration of

## Protection against oxidative stress

TBARS inhibited by 37.60% at 0.30% IN VIVO

**Brightening Effect** 

- Skin brightness (L\*) +2.25% after 2h, +3.31% after 7d - Skin Tone (ITA) +9.88% after 2h, +12.48% after 7d

Melanin -5.72% after 2h, -9.70% after 7d

### Anti-Redness Effect

Erythema -9.83% after 2h, -31.51% after 7d

Redness (a value) -6.83% after 2h, -10.59% after 7d

## Firming/Anti-Sagging Effect

- Elasticity (R2) +5.69% after 7d Elasticity (R5) +12.18% after 7d Firmness (F4) +27.71% after 7d

### Hair Growth Efficacy

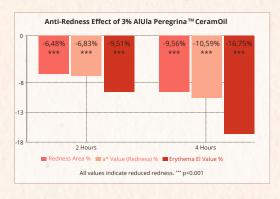
- Hair density +18% after 56d, +30% after 84d 9,000 new hairs by 56d, 14,800 by 84d

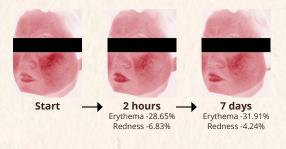
### LONG-TERM PROTECTIVE ACTION THROUGH BIOACTIVE LIPIDS

The AlUla Peregrina™ CeramOil contains a distinct ceramide profile that strengthens the skin barrier and supports essential cellular processes. Lipidomic analysis reveals three unique ceramide species and a signature hexosylceramide that are key to its efficacy.

## **Soothing effect**

Phospholipase A2 is involved in the inflammation cascade by catalyzing the first step of the arachidonic acid pathway. A clinical study demonstrates that AlUla Peregrina™ CeramOil provides significant anti-redness benefits, with measurable improvements in facial redness and erythema occurring within hours of application and continuing to enhance over time.

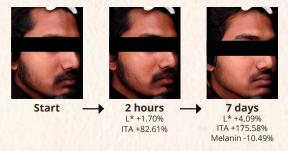


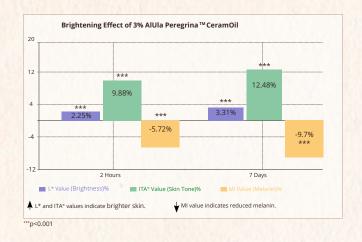


### ACTION ON CELLULAR METABOLISM TO PREVENT AND REVERSE SKIN PIGMENTATION

## A radiant complexion

The AlUla Peregrina<sup>™</sup> CeramOil safely brightens and unifies the skin through the stimulation of Zinc  $\alpha$ -2-glycoprotein (ZAG). Clinical studies confirm its efficacy in reducing melanin content while enhancing overall skin luminosity.





### HAIR DENSITY INCREASE

The AlUla Peregrina™ CeramOil delivers significant hair density improvements through its unique bioactive compounds that support follicle health and optimize the hair growth cycle. Clinical testing demonstrates remarkable increases in hair count across diverse scalp conditions, providing an effective natural solution for those experiencing thinning hair or seeking enhanced hair

Volunteer
10

Day 0

Day 0

Day 56

estimated total new hairs 15,000

bairs 32,500

Day 84

estimated total new hairs 32,500

