CLEAR OLÉOACTIF®

Holistic skin perfector

Substantiated oil-based active ingredient concentrated by
Oléo-éco-extraction patented green process

HALLSTAR
BEAUTY

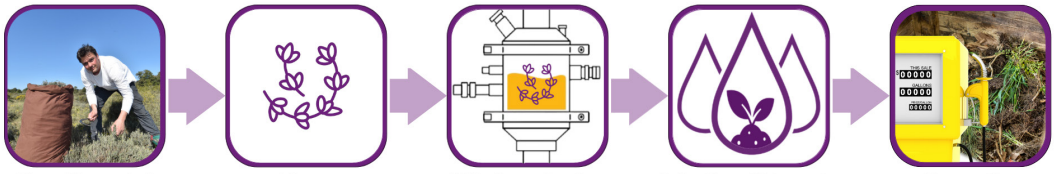
CLEAR OLÉOACTIF®

A NATURAL SOLUTION FOR FLAWLESS SKIN

CLEAR Oléoactif® is an active ingredient based on the sustainable use of an organic, wild and upcycled thyme with remarkable properties. Highly concentrated in thymol and carvacrol, CLEAR Oléoactif® acts as a holistic skin perfector by targeting the main mechanisms involved in all types of skin imperfections (irregular skin texture, enlarged pores, redness, oiliness, and skin lesions). This ingredient is eco-processed, vegetal, COSMOS-certified, and of 100% French origin, with proven efficacy at 1% dose.

UPCYCLED, CLEAN AND LOCAL INGREDIENT

CLEAR Oléoactif® is an active ingredient crafted from the south of France (raw materials and manufacturing). The thyme (*Thymus vulgaris*) is sourced in the region of "Pic Saint Loup," a place that shelters a natural local Mediterranean ecosystem from which Hallstar Beauty has drawn inspiration to create this active. CLEAR Oléoactif® is the outcome of a socially responsible, ecological, and sustainable value chain:



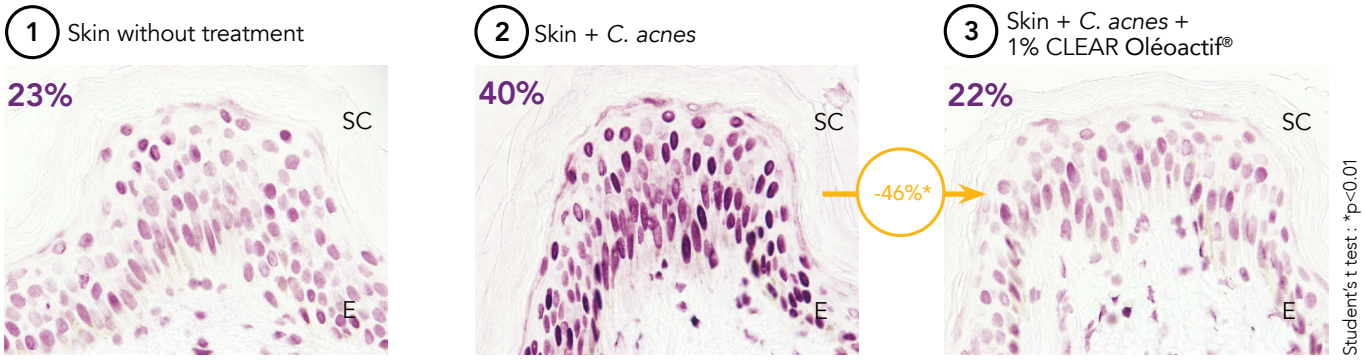
- Best harvesting practices: wild picking, no irrigation, only manual techniques, low environmental impact, use and preservation of local traditional knowledge, fair remuneration of harvesters.
- Compliance with biodiversity laws and naturalness requirements: obtention of the first Internationally Recognized Certificate of Conformity (IRCC) at the Access and Benefit-Sharing Clearing-House (ABSCH), for a French genetic resource (thyme) for commercial purposes. CLEAR Oléoactif® holds the maximum possible score in terms of naturalness (ISO 16128).
- Collaboration with the Regional Natural Spaces Conservatory (Occitanie) for understanding, managing, and preserving the natural heritage values associated with *Thymus vulgaris*.
- Valorization of a thyme co-product from food industry: discarded raw material with a blend of leaves ± stems and flowers.
- Planet-friendly production method: eco-process using the patented Oléo-éco-extraction technology, low carbon footprint (0.19 kg CO_2 eq. /kg of product), rational consumption of water and electricity, local recycling of 100% of biowaste.

HOLISTIC SKIN PERFECTOR

Several efficacy studies have been performed to demonstrate the mechanisms of action of CLEAR Oléoactif®.

- Antioxidant protection of lipids keeping a healthy sebum to avoid skin imperfections [1][2]. Activity 6 times better than vitamin C (*in tubo* test).

NEW
- Significant inhibition of inflammatory enzyme COX-2 (cyclooxygenase-2) in a dose-dependent manner, reducing the expression of mediators responsible for redness and skin lesions [3] (*in tubo* test).
- Neutralization of epidermal lesions preserving the skin structure from *C. acnes* alterations (*ex vivo* test at 1% dose).
- Inhibition of inflammatory response decreasing the secretion of IL-8 (interleukin-8) by -57%* *vs* control (*ex vivo* test at 1% dose).
  Student's t test: * p<0.1
- Prevention of hyperkeratinization completely inhibiting the 5-LOX expression (5-lipoxygenase) after *C. acnes* application (*ex vivo* test at 1% dose – pictures: immunostaining and quantification of 5-LOX).



CLINICAL EFFICACY ON ALL TYPES OF SKIN IMPERFECTIONS AT 1% DOSE

NEW

TEST IN VIVO

Study design no. 1

A randomized double-blind study is conducted on 22 Caucasian women (24-44 years old) to assess the impact of CLEAR Oléoactif® *vs* placebo on skin roughness and pore size, after twice-daily application for 28 days (hemi-face).

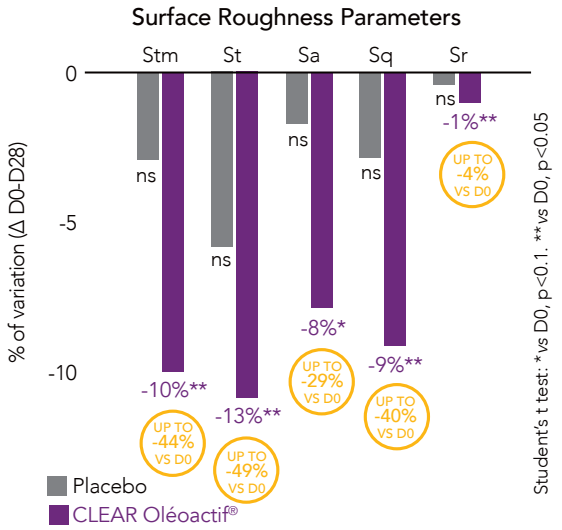
Smoothing effect

Roughness consists of the presence of irregularities on the skin surface. These conditions result in a problematic skin texture made up of peaks (pimples, blemishes) and valleys (folds, wrinkles, pores) on either side of a mean plane.

A 3D topographic map of one subject's cheek-nose area (included below) illustrates surface roughness at D0 and D28 (AEVA-HE) across 5 parameters: Stm, St, Sa, Sq and Sr. The lower the roughness parameter values, the smoother the skin.

After 28 days of application, CLEAR Oléoactif® smoothes the skin by significantly decreasing the 5 roughness parameters.

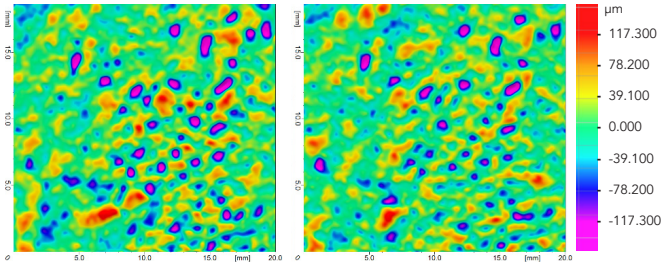
CLEAR Oléoactif® visibly removes skin irregularities (3D Skin topography below) and improves the skin aspect: texture is smoother, pores are tightened, skin is mattified.



Vol #1 - Age 33

D0 D28

Vol #2 - Age 28



D0 D28

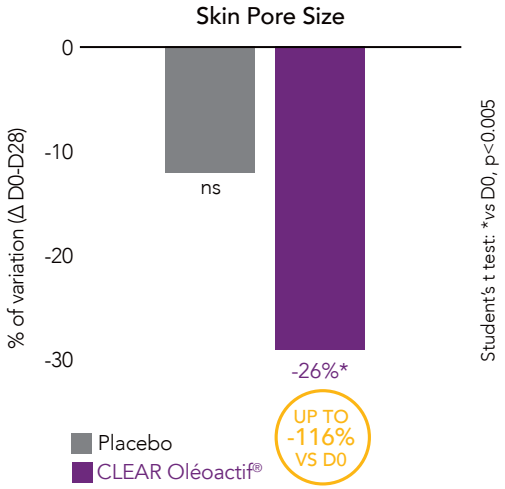
Color scale: 0 = threshold value (no skin irregularities); negative values = negative microrelief (folds, wrinkles, pores); positive values = positive microrelief (pimples, blemishes).

Pore minimizing action

On D0 and D28, an assessment of pore size is carried out by a clinical expert on cheek-nose area using a 5-degree visual scale.

After 28 days of application, CLEAR Oléoactif® significantly decreases skin pore size by -26%* (up to -116%).
Student's t test: *vs D0, p<0.005

CLEAR Oléoactif® narrows skin pores 3 times more than the placebo**.
2-way ANOVA test: ** p<0.1



CLINICAL EFFICACY ON ALL TYPES OF SKIN IMPERFECTIONS AT 1% DOSE

Study design no. 2

The effect of CLEAR Oléoactif® on the reduction of skin lesions, removal of skin redness and sebum variation is clinically evaluated after twice-daily application for 28 days. This randomized double-blind study is performed on 50 Caucasian volunteers (women and men) aged from 13 to 39 years-old and separated into two distinct groups (1% CLEAR Oléoactif® *vs* placebo).

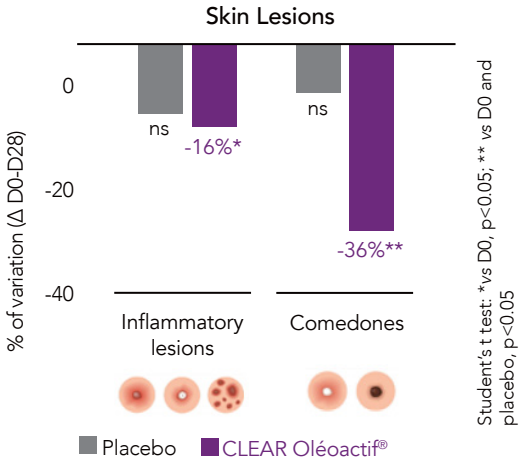
Removal of inflammatory lesions and comedones

A clinical scoring of:

- inflammatory lesions (papules, pustules, nodules)
- and comedones (microcysts, blackheads, whiteheads) is conducted by a dermatologist on the whole face at D0 and D28.

CLEAR Oléoactif® significantly decreases both types of skin lesions. It has a powerful comedolytic effect. Comedones are significantly reduced across all the volunteers and up to:

- -80% in women, -86% in men
- -86% in teenagers (< 25 years-old)
- -90% in adults (≥ 25 years-old)



Regulation of sebum production

Instrumental measurements of sebum are performed on forehead and cheeks. CLEAR Oléoactif® significantly reduces the skin sebum responsible for visibly oily skin by respectively -26%* (up to -52%) and -35%** (up to -56%) on forehead and cheeks.
Student's t test: *vs D0, p<0.05; **vs D0 and placebo, p<0.05

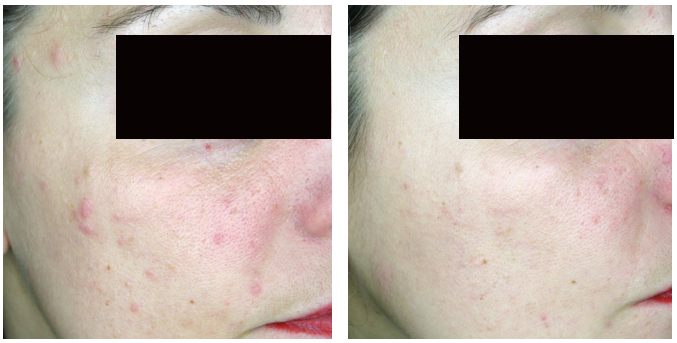
Reduction of skin redness

Chromametric measurements of a* parameter are carried out on both cheeks. After 28 days of application, CLEAR Oléoactif® significantly suppresses skin redness by -4%* (up to -22%).
Student's t test: * *vs* D0, p<0.05. Placebo: no significant effect

This improvement is visibly confirmed by a dermatological scoring of the "redness of the skin" through a 10-degree visual scale. A reduction of -12%* (up to -50%) is clinically measured.
Student's t test: * *vs* D0, p<0.05. Placebo: no significant effect

CLEAR Oléoactif® has a soothing effect, reducing redness and signs of inflammation. It is suitable for blemish-sensitive and reactive skin.

Vol #22 - Age 33 - Female



D0 D28

TECHNICAL AND REGULATORY DATA

INCI NAME:	Camelina Sativa Seed Oil (and) Thymus Vulgaris (Thyme) Flower/Leaf/Stem Extract
RECOMMENDED DOSE:	1% - 5%
RECOMMENDED pH:	3-10
SOLUBILITY:	Liposoluble
FORMULATION:	In the fatty phase before emulsification or at the end of the formulation process or directly in anhydrous formulas.
APPLICATIONS:	Suitable for all skin types. Smoothing care, pore minimizing, blemish-prone skin care, combination and oily skin care, skin with imperfections, uneven skin care, anti-redness, and soothing. Prevention of "maskne." Make-up, anhydrous formula, mattifying products, cleansing products, oily serums, primers, color cosmetics. Women and men care. Teenager and adult care.

[1] C.C. Zouboulis et al. Acne is an inflammatory disease and alterations of sebum composition initiate acne lesions. *JEADV*. 2014; 28, 527-532.
[2] K. Chiba et al. Skin roughness and wrinkle formation induced by repeated application of squalene-monohydroperoxide to the hairless mouse. *Exp Dermatol*. 1999; 8:471-479
[3] E. Makrantonaki et al. An update on the role of the sebaceous gland in the pathogenesis of acne. *Dermato-Endocrinology*. 2011; 3(1):41-49

