



**ALPAFLOR® ALP®-SEBUM:** *Effective treatment against oily skin and its related problems.*



**ALPAFLOR® ALP®-SEBUM** is the new Ecocert® certified Alpine treatment specially developed for oily and shiny skin products.



**ALPAFLOR® ALP®-SEBUM** reduces sebum production and oily appearance of skin as well as the size of pores.

**ALPAFLOR® ALP®-SEBUM** is produced from the rare Alpine plant *Epilobium fleischeri* which is cultivated in the Swiss Alps and certified organic by BIO Suisse.

**Alpaflor** 

plant extracts from the swiss alps

Exclusive NA Dist.  
Centerchem, Inc  
Norwalk, CT 06850  
[www.centerchem.com](http://www.centerchem.com)  
203-822-9800

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# ALPAFLOR® ALP®-SEBUM

**ALPAFLOR® ALP®-SEBUM** is a new treatment ingredient specifically designed for oily skin and sensitive skin products. It has been clinically shown, in vivo, to reduce the size and appearance of pores, reduce skin inflammation and reduce the production of 5 $\alpha$ -reductase. **ALPAFLOR® ALP®-SEBUM** is produced from the rare Alpine plant *Epilobium Fleischeri*.

Alpine plants are believed to contain especially high concentrations of metabolites to protect them against the environmental stress of high altitudes. These plants are ideally suited feedstocks for the production of ingredients to treat and protect our skin.

The plants are cultivated at altitudes between 1000 and 1500 metres following the requirements of Bio-Suisse, whose reputation and label stands for:

- natural diversity
- no use of chemical and synthetic pesticides or fertilizers
- no use of genetic engineering and unnecessary additives
- independent inspection of organic farming and processing by Bio-Inspecta.

Combining its long experience in natural product extraction coupled with the **ALPAFLOR®** philosophy to develop active ingredients based on the research of rare Alpine plants organically cultivated in the Swiss mountains, PENTAPHARM introduces **ALP®-SEBUM** as the new Ecocert® certified Alpine treatment against oily skin and its related problems.

## Properties:

- reduces oiliness by down regulating the production of 5 $\alpha$ -reductase
- reduces skin inflammation by inhibiting the production of IL-1 and IL-8

## Functions:

- **ALPAFLOR® ALP®-SEBUM** is an innovative treatment against oily skin and its related problems
- **ALPAFLOR® ALP®-SEBUM** reduces sebum production and oily appearance of skin
- **ALPAFLOR® ALP®-SEBUM** reduces the size of pores

## Cosmetic applications:

- Products designed to treat oily and oily appearing, shiny skin
- "Oil free" products and product lines
- T-zone oiliness and combo skin products
- Skin care products for young skin
- Whitening treatments targeting pore size reduction
- Soothing cosmetic products for oily and combo skin
- Natural and/or Organic cosmetic formulations: (**ALPAFLOR® ALP®-SEBUM** is certified by Ecocert®)

## Suggested concentration:

1-3%

## Formulation:

**ALPAFLOR® ALP®-SEBUM** is a clear to slightly opalescent, amber to brown colored slightly viscous liquid. It is readily incorporated into the aqueous phase of a formulation.

## INCI Name (as listed in the CTFA Dictionary):

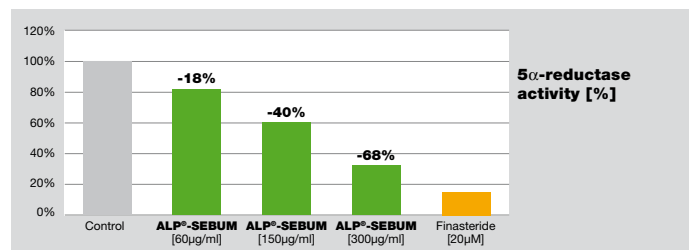
Glycerin, Water, Epilobium fleischeri extract (preserved with Potassium sorbate)

## Efficacy Tests:

### In vitro test:

The efficacy of **ALPAFLOR® ALP®-SEBUM** has been demonstrated in vitro by measuring its ability to inhibit 5 $\alpha$ -reductase.

### 5 $\alpha$ -reductase inhibition



It has also been shown to inhibit IL-1 and IL-8 to reduce skin inflammation.

### In vivo test:

An in vivo study has been carried out on 21 female volunteers for a duration of 56 days.

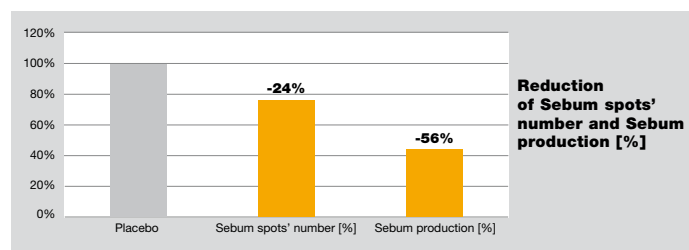
An emulsion containing 3% of **ALPAFLOR® ALP®-SEBUM** was applied twice daily.

Measurements have been made at Day 0 and Day 56, compared to placebo.

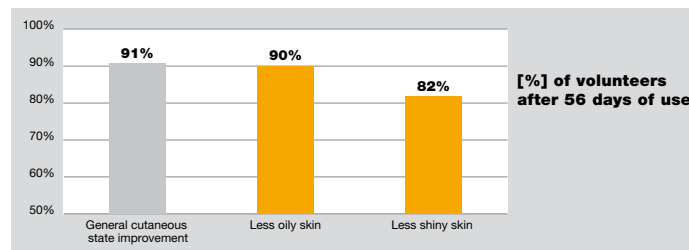
## REDUCTION OF PORE SIZES

Clinical scoring (visual evaluation by a dermatologist) demonstrated a reduction of the pore sizes with 18% of the volunteers. No pore size reduction was found with the placebo.

## DECREASE IN SEBUM PRODUCTION



## CUTANEOUS STATE



## Additional information

The **ALPAFLOR® ALP®-SEBUM** containing product was determined to be non-comedogenic (not contributing to the formation of blackheads, microcysts, papules or pustules) whereas the placebo product was shown to cause an increase in the number of blackheads over the course of the study. These results were consistent with the sebum and inflammation reducing properties of **ALPAFLOR® ALP®-SEBUM**.