



**ALPAFLOR® GIGAWHITE™**

**Alpaflor** 



**The Alpine skin lightener  
and age spots reducer**

[www.pentapharm.com](http://www.pentapharm.com)

EXCLUSIVE NA DISTRIBUTOR  
CENTERCHEM, INC  
NORWALK, CT, USA  
203-822-9800\* 203-822-9820  
[www.centerchem.com](http://www.centerchem.com)

Unlimited. **DSM**

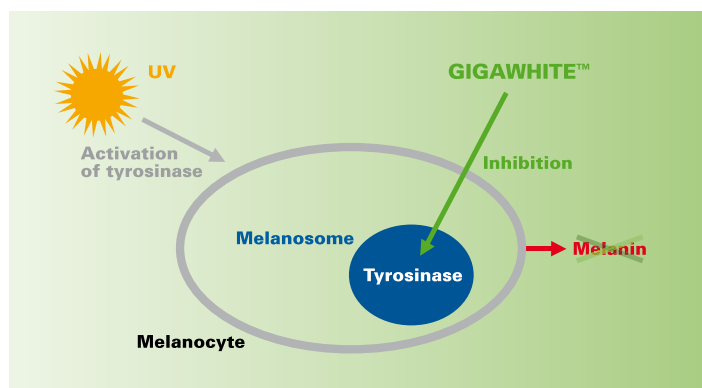
# ALPAFLOR® GIGAWHITE™

**ALPAFLOR® GIGAWHITE™** is an ALPAFLOR® skin lightener developed from Alpine plants. ALPAFLOR® GIGAWHITE™ can brighten and even skin tone as well as reduce the color intensity of age spots.

## Properties

- Tyrosinase inhibiting activity

ALPAFLOR® GIGAWHITE™'s development is the result of a research program in which about a hundred plants were selected for their tyrosinase-inhibiting capacity. Dopachrome formation was measured using a spectrophotometer. Of the hundred plants tested, 15 were selected for their *in vitro* tyrosinase-inhibiting activity and were subsequently tested on cell cultures. In the cell cultures, 7 plants manifested even greater tyrosinase-inhibiting activity. These were active not only on whole cells (with their membranes) but also on cell lysates (the membranes having been destroyed). It was this discovery that led to the development of ALPAFLOR® GIGAWHITE™. The plants were combined in a proprietary and synergistic ratio maximizing its activity and producing an even more effective compound. In *in vitro*, *ex vivo* and *in vivo* tests, ALPAFLOR® GIGAWHITE™ has an effect on the tyrosinase-inhibiting mechanism involved in melanin biosynthesis.



## Functions

- Skin-lightening activity
- Reduction of age spots color intensity
- Evening of skin tone

## Cosmetic applications

- All types of skin lightening/brighteners and anti-age spots formulations
- Antiaging hand care

## Formulation

ALPAFLOR® GIGAWHITE™ is a clear, amber colored liquid. It is water soluble and should be incorporated into the cosmetic formulation at temperatures <60°C. ALPAFLOR® GIGAWHITE™ is stable in the pH range of 3.0 to 6.5. ALPAFLOR® GIGAWHITE™ is compatible with ethanol in concentrations up to 50%.

## ALPAFLOR® GIGAWHITE™

Ecocert® approval

"Raw material conformity according to the ecological and organic cosmetic standards"

DSM Nutritional Products Ltd  
P.O. Box 2676  
CH-4002 Basel, Switzerland  
info.dnp@dsm.com  
www.dsm.com, www.pentapharm.com

## Suggested concentration

3–5% ALPAFLOR® GIGAWHITE™

## INCI name

Water, Glycerin, Alcohol, Malva Sylvestris (Mallow) Extract, Mentha Piperita (Peppermint) Leaf Extract, Primula Veris Extract, Alchemilla Vulgaris Extract, Veronica Officinalis Extract, Melissa Officinalis Leaf Extract, Achillea Millefolium Extract

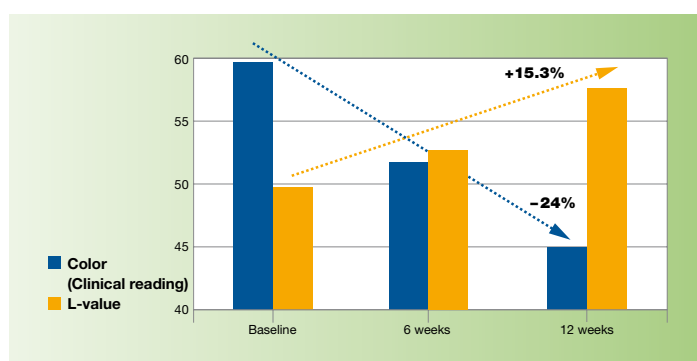
## Product codes

910-02 (Pentapharm); 50 3729 8 (DSM)

## Efficacy tests

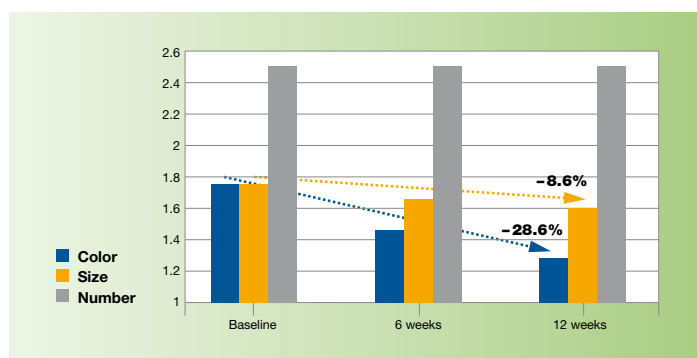
### In vivo

#### 1. Skin lightening activity



At a concentration of 5%, ALPAFLOR® GIGAWHITE™ shows significant lightening activity after 12 weeks of treatment on Asian skin, without observing any particular irritation (increasing L-value or decreasing color clinical reading = lighter skin).

#### 2. Reduction of age spots color intensity



At a concentration of 5%, ALPAFLOR® GIGAWHITE™ shows significant reduction of age spots color intensity after 12 weeks of treatment.

Alpafloor