

GIGAWHITE™

Alpaflor 
plant extracts from the swiss alps
pflanzenextrakte aus den schweizer alpen
extraits de plantes des alpes suisses



- GIGAWHITE™ is a plant-derived, preservative-free skin lightener.
- GIGAWHITE™ was developed using an *in vitro* assay, human cell cultures and a skin model with barrier effect. Its efficacy was proven in an *in vivo* study on humans.
- An optimal skin-penetrating formulation enhancing the activity of GIGAWHITE™ was elaborated.
- GIGAWHITE™ has a significant skin whitening effect at 5% and activity to reduce the color and size of age spots.
- PCT patent pending.

PILOT IN VIVO SKIN WHITENING STUDY WITH 5% GIGAWHITE™

Ten subjects of Asian descent, ages 25-55, with dark spots on face applied an experimental test product AWT 1656 (5% GIGAWHITE™) to each side of the face for a period of three months.

Skin Whitening - Clinical Grades

The results represented in the graphs compare the whitening attributes of formula AWT 1656 used for three months. Clinical scores are reported on a 1-100 scale, the higher the score the darker the skin. As can be seen substantial changes are observed after six weeks of treatment with scores going from an average of 59.82 to 52.53, a lightening of 12.2%. After three months even more whitening is observed with scores decreasing to 45.44 for a decrease in skin darkness of 24%.

SKIN WHITENING - MINOLTA METER

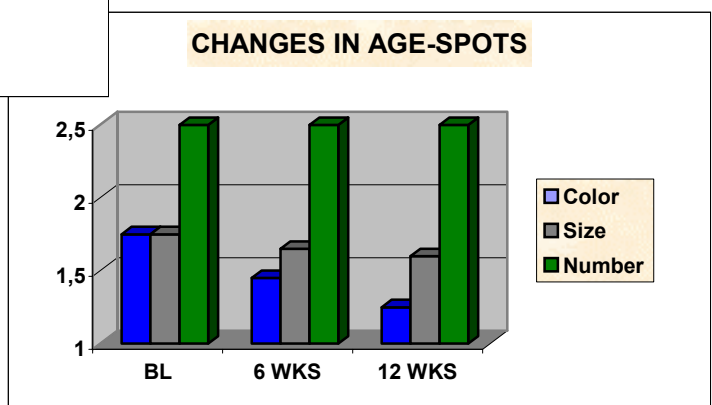
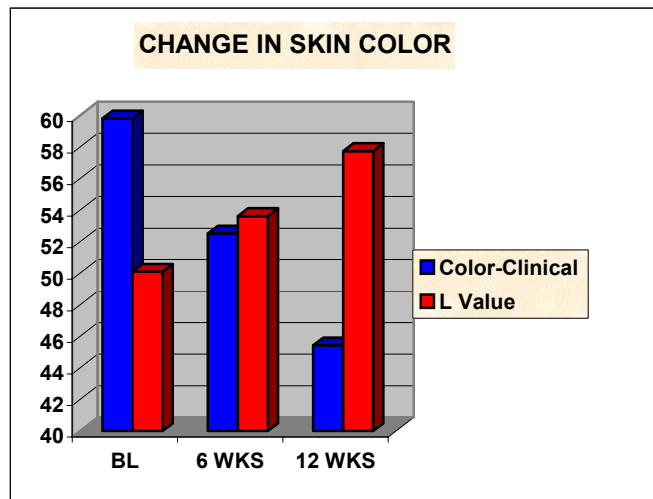
Objective measurements of changes in skin color during product usage were obtained on the face with the Minolta Meter. A significant decrease in skin color was observed after six and twelve weeks. After six weeks a 7% change was observed in the L value and this increased to 15.3% after 12 weeks. No changes in a* and b values were observed indicating that the color change was a general lightening effect and did not result in increase irritation or change in green or red values in the skin

AGE SPOT EVALUATION

On test subjects age spots were observed on the face. These spots were enumerated in total and graded from 1-3 on the basis of size and color. Results suggest that some changes were observed with respect to the size and darkness of the age spots in comparison with surrounding skin. After twelve weeks of treatment a 28.6% decrease in color of the agespots was observed while size decreased by 8.6%. As would be expected there was no decrease in the number of age spots.

CONCLUSION

The results presented herein demonstrate that the test material evaluated has a **significant skin whitening effect.**



TECHNICAL INFORMATION

PRODUCT SPECIFICATIONS

Appearance	:	clear, amber coloured, slightly viscous liquid with a characteristic odour
pH	:	5.5 – 6.5
Relative density (20°C)	:	1.050 – 1.150
Refractive index (25°C)	:	1.360 – 1.430
Preservative	:	selfpreserving
Microbial count	:	< 100 CFU/ g
Specified pathogens	:	absent, not detectable

PRESERVATION AND MICROBIOLOGY

GIGAWHITE™ is selfpreserving and free of specified pathogens. The amount of non-pathogenic microorganisms with less than 100 CFU per ml of GIGAWHITE™ meets the CTFA microbiology guidelines. GIGAWHITE™ fulfills the criteria of the repetitive germ loading test described by Shyam B. Singh-Verma (Parfümerie und Kosmetik 68(7), 414-421, 1987).

SAFETY AND ECOLOGY

Standard and well-defined safety testing has been performed on GIGAWHITE™ which has proved the product to be safe for cosmetic use. The data available do not indicate any environmental risks. The manufacturing process is designed to meet the criteria for the assessment of safety, health and protection of people and of the environment set out in the *Responsible Care Program*.

PROCESSING AND DOSAGE

GIGAWHITE™ can be processed either warm (< 60°C) or cold, and is incorporated into the aqueous phase of a cosmetic formulation. GIGAWHITE™ is stable in the pH-range of 5.0 to 8.0. In formulations, GIGAWHITE™ is compatible with ethanol at concentrations of up to 50%. For skin lightening preparations, we recommend the addition of 3 to 5% GIGAWHITE™. A Basic Guide Formulation with UV screens and penetration enhancers is available upon request.

STORAGE AND SHELF LIFE

GIGAWHITE™ should be stored in the original sealed containers protected from light in a clean place at a temperature between 15 and 25°C. In order to avoid secondary microbial contamination, following opening, containers should be refrigerated. If stored under the recommended conditions, GIGAWHITE™ remains stable for at least 3 years.

GENERAL PRODUCT INFORMATION

Trade Name	:	GIGAWHITE™
Product Code	:	910-01
INCI Name (CTFA)	:	Water, Glycerin, 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
CAS No	:	7732-18-5, 56-81-5, 84082-57-5, 84082-70-2, 84787-68-8, 84695-94-3, 85117-19-7, 84082-61-1, 84082-83-7
EINECS No	:	231-791-2, 200-289-5, 282-003-9, 282-015-4, 284-109-0, 283-614-3, 285-571-6, 282-007-0, 282-030-6
Customs Tariff No	:	1302.20 (Harmonized System Number)
Shelf life	:	> 3 years

COMPOSITION

A) Ingredient(s)	INCI Name #	Amount *
As listed in the CTFA Dictionary	Malva Sylvestris (Mallow) Extract,	E
	Mentha Piperita (Peppermint) Leaf Extract,	E
	Primula Veris Extract,	E
	Alchemilla Vulgaris Extract,	E
	Veronica Officinalis Extract,	E
	Melissa Officinalis Leaf Extract,	E
	Achillea Millefolium Extract	E
B) Additives	INCI Name #	Amount *
Solvents	Water	B
	Glycerin	B
Preservative (selfpreserving)	none	-
Others (buffers, antioxidants, colorants)	none	-

CTFA Dictionary

* FDA-Code (A = > 50%, B = 25-50%, C = 10-25%, D = 5-10%, E = 1-5%, F = 0.1-1%, G = < 0.1%)

REMARK

Although these data and information have been prepared with the utmost possible care, we reserve the right to make changes due to product improvement and other considerations.

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