

AVOCADIN®

06/06

Art. No. NA21015

INCI name :	Persea Gratissima (Avocado) Oil, Persea Gratissima (Avocado) Oil Unsaponifiables
INCI name EU:	Persea Gratissima Oil, Persea Gratissima Oil Unsaponifiables
Name of the plant:	Latin: Persea gratissima English: Avocado French: Avocat German: Avocado
Plant material:	Fruit
Japanese approval :	YES
Recommended level of use:	2 - 10 %

Content of active components: Unsaponifiables: approx. 25 %

Description:

AVOCADIN® is based on Avocado Oil and the unsaponifiable fraction mainly consisting of phytosterols. Approx 80 - 85% of the unsaponifiable fraction make the sterol part. These values may vary as it is a product of natural origin.

Studies have shown that AVOCADIN® offers a natural botanical activity as skin conditioning moisturiser while providing a natural means of extra UV-damage protection as a UV stress modulator.

Chemistry and Properties of Phytosterols

AVOCADIN® contains phytosterols mainly consisting of β -sitosterol and stigmasterol as well as others such as campesterol and brassicasterol.

Phytosterols are generally to be found anywhere in plants where growth is taking place, so especially in the shoots, buds and seeds.

As a group, sterols are the third largest lipid component of the stratum corneum, after fatty acids and ceramides. They do not occur naturally and must be obtained by a daily ingestion of food. Then phytosterols are said to be a component of the lipid layer of the skin.

Skin Care Benefits : Moisturising and Anti-Ageing

The classical uses of phytosterols in cosmetics are as follow:

Enhanced moisturisation by 19% (see the results below – results of the test available on request)

Improvement of skin elasticity by 8 % (results of the test available on request)

Increase in smoothness

Reduced sensitivity to UVB irradiation (see the results below – results of the test available on request)

Protection against ageing : increased ratio of soluble to insoluble collagen

Skin protection (in general for inflammatory changes of the skin)

Through their disc-shaped molecular structure phytosterols encourage the formation of film on the skin, hinder absorption of toxic substances and ensure a good level of skin moisturisation by preventing excessive TEWL (transepidermal water loss). The hydrating effect of sterols is explained both by the OH-groups and by the „reduction“ of the skin surface through the formation of film.

Phytosterols are said to have positive effects on senile skin atrophy, follow-up treatment of scars, flakiness, rough skin and age spots. They have the property to mobilize and enhance the rate of soluble collagen and proteins from conjunctive cutaneous tissues.

At the same time the phytosterol film on the skin works like a depot in the lipid filled inter-cellular space of the horny skin layer, from which oil soluble active ingredients such as tocopherol, carotenoïd or bisabolol can diffuse.

Applications

Sunscreens and after-sun preparations

Anti-aging products

Moisturising creams

Products for dry, sensitive or irritated skin

AHA-containing products to reduce possible irritation

Preparation for over-pigmentation

Baby care

Benefits in Formulation

Vegetal derived product

High stability : no oxidation occurs

Stabilisation of water-in-oil emulsions

Reduction of possible irritation from other formulation ingredients (UV-filters, detergents,...)

Enhancement of the smoothness and the spreadability of the cream

Extensive documentation on the toxicology, tolerance and efficacy available.

Toxicology CIR Report, CTFA 1995

Skin tolerance Consumer Product Testing, Croda Inc., 1992

Mutagenicity Ames Test NOVAROM 1993

Efficacy test Cutometer and Corneometer test, NOVAROM, 1993

UV-protection: in-vitro MTT-Test and PGE-2, Test, Croda INC. 1997

Heavy metals and Random testing

pesticides analysis

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Processing advice:

Storage in warmer rooms can lead to surface oil separation. In colder storage phytosterols have the tendency to form larger crystals. By heating and stirring before processing the AVOCADIN® can be homogenised without any negative effect on the quality of the product. The product should melt at temperatures of up to 110°C (dependent on the formulation).

Specifications:

	Minimum Value	Maximum Value
Peroxide Value	0.0	5.0 mEq O ₂ /Kg
Acid Value	0.0	3.0 mgKOH/g
Saponification Value	120	150 mgKOH/g
Odour	Aromatic	
Colour	Light yellow	yellow

Appearance Greasy mass, fatty substance

Total microbial count

Bacteria < 100 cfu / ml

Moulds and yeasts < 10 cfu / ml

Preservative

Antioxidant

Ascorbyl Palmitate (0.1 %)

Tocopheryl acetate (0.1 %)

INCI Name:

Persea Gratissima (Avocado) Oil
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CAS-Nr.:

8024-32-6
91770-40-0

EINECS Nr.:

232-428-0
294-825-5

This data sheet replaces the earlier version dated 09/99, 01/0, 07/01, 02/03, 02/04, 06/04, 07/04.

This extract is based on a **product of nature** which is subject to natural variations. However, this has no influence on the safety of the product or its suitability for use.

Above mentioned specifications are based on our latest information. They do not release the buyer from performing a quality check. No legally binding promise regarding the suitability of the product for a specific use may be derived. Freedom from patent restrictions must not be assumed.