

Sesaline® Bio*



A natural antiradical shield to protect skin against external aggression.

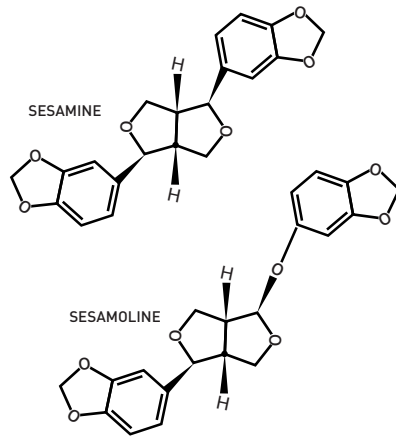
Sesame, a universal plant with multiple benefits

Sesame was probably one of the first oil-bearing plants cultivated by man. Some authors attribute the magic formula "Open, Sesame!" to the fact observed over the millennia that the consumption of sesame has favourable effects on the memory and on clear thinking. In the East, it is the symbol of abundance. In Hindu mythology, sesame was a symbol of immortality.

It has a reputation for maintaining or restoring vitality, for being a tonic, and for helping to combat fatigue and stress.

From time immemorial, sesame has been used in the form of an oil in the preparation of both food and beauty products, thanks to its excellent stability.

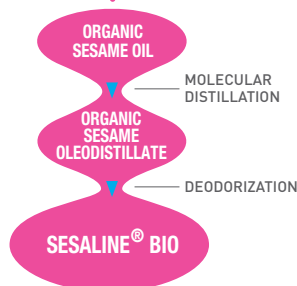
Specific molecules identified



In order to preserve all of its qualities, virgin sesame oil is obtained by cold pressing the untoasted seeds.

Apart from the components classically found in the unsaponifiable fraction of vegetable oils, sterols, squalene, and tocopherols, sesame oil contains two powerful natural anti-oxidants, sesamine and sesamolone.

Thanks to a physical process (without the use of solvents), known as molecular distillation, the unsaponifiable fraction of the oil is concentrated so as to obtain the oleodistillate. Sesaline® Bio thus contains between 10 and 15% of unsaponifiable oils, with a minimum of 4% of sesamine, and 2% of sesamolone.



APPLICATION: anti-aging skincare

DOSE: 0.2 to 2%

DESCRIPTION: orange-yellow oil, with a characteristic odour, exhibiting a white precipitate.

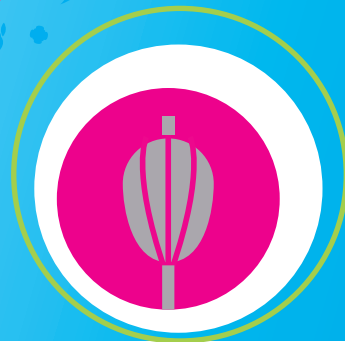
INCI NAME: Sesamum Indicum (Sesame) Oil Unsaponifiables

EXPANSCIENCE®

LABORATOIRES

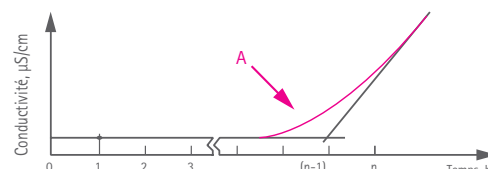


Sesaline® Bio*



Resistance to oxidation and antioxidant power**

The Rancimat test is a predictive method of evaluating the stability of fatty substances with respect to oxidation. Oils under test are heated to 98°C and subjected to sparging with oxygen (20 ml/min). The increase in the conductivity of the oil reveals the degree of oxidation. Stability is expressed in terms of hours.



Sweet almond oil -----16 hrs
 Sesaline® Bio ----->60 hrs
 Thanks to the presence of sesamine and sesamoline,
 Sesaline® Bio exhibits excellent resistance to oxidation.

Sweet almond oil + 1% Sesaline® Bio -----18 hrs 45 mins
 Sweet almond oil + 5% Sesaline® Bio -----20 hrs 30 mins
 The great anti-oxidant power of Sesaline® Bio reinforces the resistance to oxidation shown by sweet almond oil.

Antiradical activity

The antiradical activity of Sesaline® Bio is evaluated by measuring the reduction in the cytotoxicity induced by UV-A radiation. Free radicals are generated by the irradiation of fibroblasts in culture with UVA (2.3 J/cm²). Cellular viability is evaluated by an MTT test (a colorimetric method) in the absence of any active principle or in the presence of vitamin E (α-tocopherol) or of Sesaline® Bio.

Without any active principle, toxicity in the fibroblasts is close to 70%, 24 hours after irradiation. The addition of vitamin E or of Sesaline® Bio prior to, during, or after irradiation makes it possible to reduce such cytotoxicity as follows:

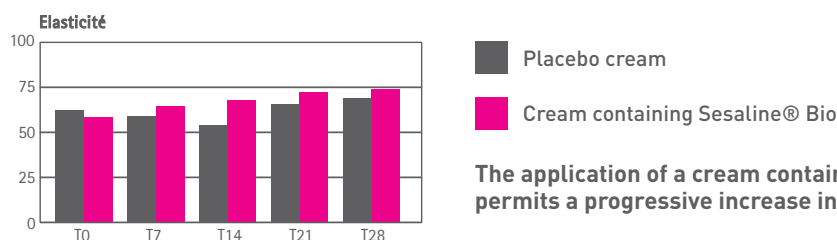
	Vitamin E (50 µg/ml)	Sesaline® Bio (50 µg/ml)
Preventive	100	100
Immediate	81	16
P + I	100	87
Curative	29	0
I + C	91	47
P + I + C	100	98

Efficacité protectrice (%)

When applied prior to irradiation, Sesaline® Bio ** at 50 µg/ml offers the fibroblasts complete protection from the deleterious effects of the UV.

Clinical test**

Ten female volunteers aged from 29 to 49 years took part in a double-blind, placebo-controlled test in order to evaluate the changes to the mechanical properties of the skin induced by the application of a product (Cutometer). They tested a cream containing 2% Sesaline® Bio and a placebo on the top of the forearm for a period of four weeks.



The application of a cream containing 2% Sesaline® Bio permits a progressive increase in cutaneous elasticity.

* Raw material certified by Ecocert Greenlife according to the Ecocert Standards for Natural and Organic Cosmetics available at <http://cosmetics.ecocert.com>

** Test carried out on Sesaline®, an active principle now certified and renamed Sesaline® Bio.

www.expanscience-ingredients.com

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