

EVOIL® MACADAMIA

PRODUCT DATA SHEET



EVOIL® MACADAMIA is a Natural Refined Vegetable Oil that improves the intrinsic properties of Macadamia Oil. It displays an optimal fatty acid composition profile that provides high antioxidant protection for cosmetic formulations.

MACADAMIA OIL is a unique vegetable oil due to its high content in Palmitoleic acid, a monounsaturated fatty acid that avoids oxidation and fits with the skin's fatty acid composition. Palmitoleic acid is found in human sebum among the young, but the level dramatically drops in mature skin.

EVOIL® MACADAMIA exhibits a long shelf life and good resistance to rancidity due to the low content of polyunsaturated fatty acids. It is an oil with minimal colour and virtually odourless.

TECHNICAL DATA

Appearance:	Clear pale yellow oily liquid
Acidity index:	≤ 1.0 mg KOH/g oil
Peroxide value:	≤ 10.0 meq O ₂ /Kg oil
Relative density (20°C):	0.909 - 0.915 g/ml

Fatty Acid	Composition
Palmitic acid	4.4 – 8.5 %
Palmitoleic acid	4 – 6.2 %
Oleic acid	23 – 80.5 %
Linoleic acid	2.6 – 56.6 %
Stearic acid	2.7 – 6.3 %

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APPLICATION



EVOIL® MACADAMIA may be directly applied to the skin and hair. It may also be easily incorporated as an active ingredient or an excellent carrier in skin and hair care products. The recommended dosage is between 3 to 10%. **EVOIL® MACADAMIA** can also be used directly as massage oil, kept in a cool place refrigerated and tightly closed.

EVOIL® MACADAMIA applies easily and offers deep penetration and significant moisture retention together with high nourishing properties. **EVOIL® MACADAMIA** restores dry, dehydrated, and mature skin, being suitable for all kinds of cosmetic products from rinse-off to leave-on. It is helpful in cases of sunburn and wound healing.

OIL STABILITY INDEX (OSI)

The Oil Stability Index (OSI) was determined using a Rancimat instrument. The rapidity of oxidation of an oil depends on the degree of unsaturation, the presence of antioxidants, and prior storage conditions. In the OSI analysis, the rate of oxidation is slow until resistance to oxidation is overcome. This time is known as the oxidation induction period and it is a tool to determine the useful life of the oil.

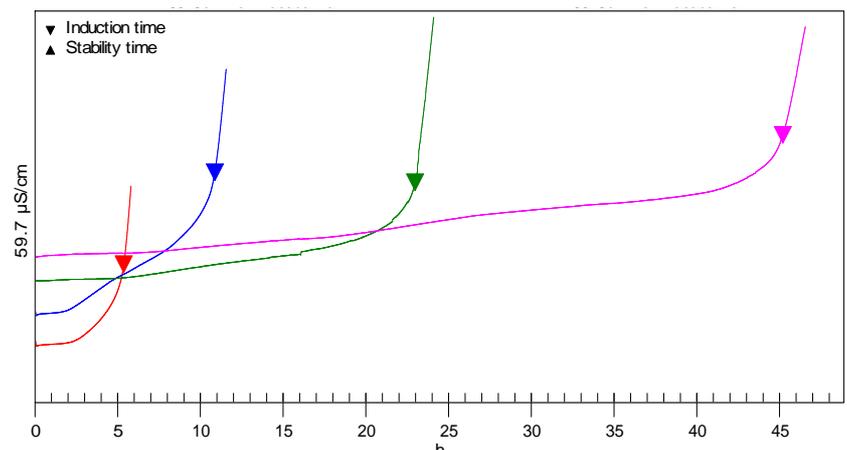
EVOIL® MACADAMIA OSI: 45.20 h (100°C).

ISO 6886 (1996)

Animal and vegetable fats and oils. Determination of oxidation stability.

Conditions

Sample amount 2.5 ± .01 g
 Temperature 100°C ± 0.2°C
 Gas flow: 20 L/h
 Vessel: 50 mL distilled water
 Evaluation Conductivity
 Induction time
 (tangent method)



Red: determination at 130°C
 Blue: determination at 120°C
 Green: determination at 110°C
 Pink: determination at 100°C

INCI Name: Macadamia Ternifolia Seed Oil and Olus (or) Vegetable Oil and Tocopherol.