

MACADAMIA OIL

INCI: *Macadamia Ternifolia Seed Oil*

CAS No.: 128497-20-1

EC No.: 281-094-0

Origin: Vegetable (Macadamia nut)

Manufacturing Method: Cold Pressed / Refined (depending on grade)

Intended Use: Cosmetic formulations

TECHNICAL DATA SHEET

Product Description

Macadamia Oil is a lightweight, fast-absorbing vegetable oil obtained from the nuts of *Macadamia ternifolia*. Due to its high oleic and palmitoleic acid content, it closely resembles the lipid profile of human sebum, making it especially suitable for skin and hair care products.

Physical & Chemical Properties

Parameter	Typical Specification
Appearance	Clear oily liquid
Colour	Pale yellow
Odour	Mild, characteristic
Density @ 20 °C	0.910 – 0.920 g/cm ³
Refractive Index @ 20 °C	1.465 – 1.470
Acid Value (mg KOH/g)	≤ 2.0
Peroxide Value (meq O ₂ /kg)	≤ 10.0
Iodine Value (g I ₂ /100 g)	70 – 85
Saponification Value (mg KOH/g)	185 – 195
Unsaponifiable Matter (%)	≤ 1.5

Fatty Acid Profile (Typical)

Fatty Acid	%
Oleic Acid (C18:1)	55 – 65
Palmitoleic Acid (C16:1)	15 – 25
Palmitic Acid (C16:0)	7 – 10
Stearic Acid (C18:0)	2 – 4

Cosmetic Use

- **Recommended usage level:** 1 – 100% (depending on product type)
- Suitable for creams, lotions, serums, hair conditioners, balms, oils

Storage & Shelf Life

- Store in a **cool, dry place**, away from light and heat
- Keep container **tightly closed**
- **Typical shelf life: 24 months**