



PRODUCT INCI NAME	Marula (Sclerocarya Birrea) seed oil
PLACE OF ORIGIN	Namibia
EXTRACTION METHOD	Cold press
PART OF PLANT	Seeds
CAS number	68956-68-3
EC number	273-313-5

MARULA OIL PROPERTIES

It is a clear, pale, yellowish-brown colour and has a pleasant nutty aroma. The main properties of the oil include:

- High nutritional value (See Table 1)
- Extraordinary oxidative stability
- Antioxidant action
- Free radical scavenging properties
- Moisturizing properties

Nutritional Content of Marula Kernels	
Moisture	4.0
Ash	3.8
Protein (g/100g)	28.3
Fat (g/100g)	57.3
Fibre (g/100g)	2.9
Carbohydrates (g/100g)	3.7
Energy Values (KJ/100g)	2703
Ca (mg/100g)	118
Mg (mg/100g)	462
Fe (mg/100g)	4.87
Na (mg/100g)	3.81
K (mg/100g)	601
Cu (mg/100g)	2.81
Zn (mg/100g)	5.19
P (mg/100g)	808
Thiamine (mg/100g)	0.42
Riboflavin (mg/100g)	0.12
Nicotinic Acid (mg/100g)	0.72

(Source: Arnold et al, 1985)

Table 1. Nutritional content of Marula kernels



Oil Composition

The fatty acid profile of Marula Oil has been found to be similar to that of olive oil. The high mono-unsaturated content (C18:1 of 72%) suggests that the oil should have a good oxidative stability. The stability of plant oils is influenced by the fatty acid composition (e.g. C18:1 / C18:2 ratio) and the presence of natural antioxidants of which the tocopherols are the most important. The tocopherol content showed that the main component is g-tocopherol (average 22 mg per 100 g oil).

Although Marula oil contains a similar fatty acid composition to olive oil, it is nearly 10 times more stable to oxidation.

Oxidative Stability of Marula Kernel Oil compared with different oils	
Oil Sample	Induction period (h) **
Marula oil *	34.2
Olive oil	4.6
Sunflower oil	1.9
Cottonseed oil	3.1
Palmolein oil	8.5

* Average taken from different marula oil samples

** Measured by Rancimat at 120 C and 20 l/h airflow

(Source: Burger et al, 1987)

Typical Properties

Acid Value	<5 mg KOH/g
Peroxide value	<15 meqO ₂ /kg
g-tocopherol	22mg/100 g oil
Rancimat (120°C, 20L/h)	20-45
Specific gravity (15oC°)	0.915-0.92
Refractive Index	1.455-1.465
Iodine value	70-76 g I ₂ /100g
Saponifation value	188-196 mg KOH/g
Flash Point	230°C
Heavy Metals	<20ppm
• Arsenic	<1
• Antimony	<5
• Cadmium	<1
• Chromium	<1
• Lead	<2



Fatty Acid Composition (Range of values)			
Saturated fatty acids		Unsaturated fatty acids	
Myristic Acid	< 0.2%	Oleic acid (omega 9)	70-80%
Palmitic acid	10-13%	Linoleic acid (omega 6)	4-9%
Palmitoleic acid (omega 7)	< 1%	α -linolenic acid (omega 3)	< 1%
Stearic acid	6-8%		

Impresario Beauty Oils Specification

Acid Value	<2 mgKOH/g
Peroxide Value	<0.5 mEq/kg
g-tocopherol	24mg/100 g oil
Eschericia coli	Not detected
Mould	< 10 cfu/g
Yeast	< 10 cfu/g

APPLICATIONS

- Skin care products: Moisturizing lotions, body butters, body and facial oils
 - Protection against photo-aging - neutralizing free radicals
 - Helps build healthy collagen
 - Provides antioxidant protection
 - Possesses anti-inflammatory properties
 - A good massage oil
 - Can be used around the eyes
 - Anti-aging properties
- Hair care products: Leave-in treatment, scalp conditioners, hair lotions
- Make-up formulations: Eye shadow, lip treatment
- Food: antioxidant properties for the nutraceutical industry

Can Replace Avocado, Olive, Almond Oil



HEALTH AND SAFETY AND NON-GMO STATEMENT

- Ionization: Product did not undergo any ionizing treatment & does not contain any ingredient/additive treated by ionization.
- Pesticides: Product conforms with regulation 396/2005 EC and its last amendments.
- Heavy Metals: Product conforms with regulation 1881/2006 EC and its last amendments.
- Non-GMO: Raw materials were not subject to any Genetic Modifications.

CONTACT DETAIL

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