

MARULA SEED OIL

INCI: Sclerocarya Birrea Seed Oil - CAS: 68956-68-3



The marula tree, *Sclerocarya birrea* subsp *caffra*, is a multipurpose 12-18m tall deciduous tree, indigenous to sub-Saharan Africa from Senegal and Sudan in the north, crossing Africa from Atlantic to Indian Ocean, to Namibia and northern KwaZulu Natal of South Africa in the south. It grows in arid hot savannah climates in well-drained sandy to sandy loam soil.

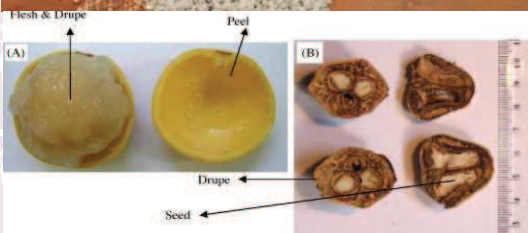
It is an abundant tree and prolific bearer, with reports of upto 3 and 5 ton of fruit harvested from one marula tree during one fruiting season.

Archaeological finds, dated around the stone age, show that the marula fruit, its nut and kernels have been used by African people for thousands of years.

Since ancient times, women have passed on their

knowledge regarding the *amazing marula* to their daughters; today, African women share marula oil with the rest of the world. Everpix' shared business, socially and environmentally sustainable approach not only brings much needed income to marginalized rural areas, but also empowers rural women to grow out of persistent poverty and reduces the vulnerability of rural households to global warming.

Virtually all parts of the marula tree are used. Its fruit is high in vitamin C and eaten as such or processed into jams, jellies, dried fruit rolls, sweets, alcoholic and non-alcoholic beverages. From the fruit an indigenous beer is brewed drawing city dwellers to the rural areas during the season. The marula nut is the waste from manual fruit pulping for community marula beer brewing.



The marula nut contains 1 to 4 edible kernels which are highly nutritious, protein rich and oily, are eaten raw or roasted and used in cooking. A highly stable oil with high antioxidant activity is extracted from the kernel. This oil is used as a meat preservative by indigenous people and by cosmetics formulators as hydrating skin lotion with anti-scarring and anti-blemishing activities and for intensive cell and tissue care of damaged skin, nails and hair.

Marula leaves provide fodder for livestock and a suitable food source for edible worms. Bark has medicinal value and gum exudates are used to dye baskets. Its wood is used to make the African drum, wooden artefacts and implements.

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Marula oil is a popular ingredient in skin and hair care products. It naturally softens, nourishes and revitalizes.

Marula oil is an excellent emollient; it is easily absorbed in the skin. It contains high amounts of oleic and linoleic acids and is ideal for topical applications.

It is high in natural anti-oxidants and has an extraordinary oxidative stability, ten times higher than that of olive oil. It exhibits free radical scavenging properties.

Marula oil has been shown to improve skin hydration and skin smoothness, to reduce redness. It outperforms sweet almond oil in each of these properties.

Use marula oil in

- anti-ageing facial creams
- products that aim to hydrate, smoothen and reduce skin blemishes and redness
- products used around the eyes, make-up and eye creams
- lipsticks
- skin care products that treat dry and chapped skin
- hair care products, especially dry, damaged fragile hair
- massage oil and as a carrier in aromatherapy
- baby care products

parameter	specification
color	golden / very pale yellow
odor	slightly nutty / none
appearance	oily liquid
microbial counts	<100cfu/g
free fatty acid (% oleic acid)	<5g oleic acid EQ/100g
peroxide value	<10meq O ₂ /kg
p-anisidine value	<1
specific gravity (15dC)	~0.913
refractive index	~1.466-1.468
iodine value	72-80g I ₂ /100g
saponification value	188-196mg KOH/g
unsaponifiable matter	0.1-0.6%

fatty acid	range (g/100ml oil)	
palmitic	C16:0	9.0-12.0
palmitoleic	C16:1	0.05-0.15
stearic	C18:0	5.0-8.0
oleic	C18:1	70-78
linoleic	C18:2	5.0-10.0
alpha linoleic	C18:3	0.1-0.6
arachidic	C20:0	0.3-0.7
9-eicosenoic	C20:1	0.1-0.5
erucic	C22:1	<0.5

Two qualities are available: crude filtered and refined. Refining is to customer specification, generally to pale yellow color, no odor, FFA<3% and PV<3meq O₂/kg.

Everpix' marula nut oil is NON-IRRITANT (skin patch test visual and chromameter analysis). FREE of pesticide (<0.1 to 0.01mg/kg; a detailed analysis sheet is available on request).

Marula oil exhibits a ten times higher oxidative stability than olive oil.

oil	induction period (h)
marula oil	34.2
olive oil	4.6
sunflower oil	1.9
cottonseed oil	3.1
palmolein oil	8.5

Rancimat at 120dC, 20l/h airflow. Source: Burger et al. 1987

Marula nut oil is rich in tocopherols (0.02-.03%) which have been documented to have a range of beneficial antioxidant and antiradical biological functions in vision, heart, cancer and degenerative diseases. Marula oil contains ~0.015% vitamin D3 and ~0.014% vitamin E.

Find the science behind marula oil in

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