

Oils of Aloha®

Macadamia Oil — Hawaii's Natural Emollient

Since 1881 Hawaii has been a world leader in the production, research and development of the species, *Macadamia ternifolia*. Oils of Aloha sources the macadamia seeds for the production of oil from the Big Island of Hawaii.



The process begins between November and February when flowering occurs. The primary harvesting period starts about half a year later in August and continues until around March, usually when the macadamia seeds reach maturity and drop. Harvesting is generally done by hand, then transported to a husking station, ready to begin processing. The macadamia seeds, still in their shells, are placed in drying bins. The internal moisture and drying temperature are carefully monitored to ensure optimal conditions. Once the seeds dry, they are cracked open, separating the kernels from the shell.

The seeds are expeller-pressed to extract all the highly monounsaturated oil. Oils of Aloha supplements this oil with natural Vitamin E to act as an



antioxidant. The result is the acclaimed Oils of Aloha Macadamia Oil, a prominent component in skin care and cooking products found worldwide.

MACADAMIA OIL

INCI Name: Macadamia Ternifolia Seed Oil
CAS #: 128497-20-1 EINECS #: 273-313-5

Raw material validated to be natural by Ecocert, FRANCE SAS

This raw material of natural origin can be used in the formulation of cosmetics certified according to ecological and organic standards.

What Makes It Work?

Macadamia Oil features exceptionally high levels of monounsaturated fatty acids. These monounsaturated fatty acids help form an extremely stable oil for skin care formulations. Palmitoleic acid, one of macadamia oil's primary components, is a proven lipid peroxidation fighter, that helps ensure skin cell structural integrity.

Macadamia Oil is nonirritating to the eyes and has no known side effects. This oil contains no allergenic sensitizers associated with peanut allergies. It is easily emulsified, and has a superior spreading coefficient. These properties make Macadamia Oil an ideal component for cosmetic and skin care products.

Oils of Aloha is committed to sharing its benefits in its most pure form. Utilizing an expeller-pressing process set to an exacting standard, Oils of Aloha's Macadamia Oil is 100% natural with no solvents used. The overall composition includes:

- Over 19% palmitoleic acid
- 57% oleic acid
- Less than 4% polyunsaturated fatty acid
- Stabilized with natural Vitamin E tocopherol (antioxidant)



This fatty acid composition has proven to be effective due to the oxidation resisting qualities of Macadamia Oil. Lipid peroxidation is a major cause of cell membrane damage; the oxidation resisting qualities of palmitoleic acid and oleic acid help prevent this damage, ensuring skin cells stay healthier longer.

MACADAMIA OIL

Macadamia Oil's Benefits

The unique profile of Oils of Aloha's Macadamia Oil offers an excellent base ingredient for many different types of products. From lipsticks to soaps to cleansers, whatever the end product may be, Oils of Aloha ensures that it will receive the best benefits nature can provide.

- Preserve the skin's youthful appeal with high palmitoleic acid concentration
- Act as a natural emollient to soften and smooth the skin
- Easily combines with other skin care components
- Cruelty free; no animal testing
- Non-GMO

Oils of Aloha's Macadamia Oil is the highest plant source of palmitoleic acid. It can be used as a base for cosmetic products without any cruelty free concerns. Macadamia Oil's unique composition has been shown to protect skin cells. Ultimately, all of these factors demonstrate the many ways Macadamia Oil can lead to healthier, more vibrant skin.

Potential Markets

Macadamia Oil's many benefits and easy absorption makes it ideal for a number of different products. The different industries that can benefit most from Macadamia Oil are:

- Skin Care: Lotions and facial/body scrubs
- Cosmetics: Lipsticks and creams
- Sun Care: Moisturizers, sun screens, and oils



TYPICAL FATTY ACID COMPOSITION	CHAIN LENGTH	DOUBLE BONDS	RANGE MACADAMIA OIL	PROFILES/PROPERTIES	
				CHEMICAL/PHYSICAL	
Palmitic	C16	0	7 to 10%	Iodine Value	71—82
Palmitoleic	C16	1	19 to 23%	Saponification #	185—205
Stearic	C18	0	2 to 3%	Refractive Index	1.463—1.472
Oleic	C18	1	56 to 59%	Specific Gravity	0.909—0.915
Linoleic	C18	2	2 to 5%	Acid Value	Less than 1
Linolenic	C18	3	trace	Color	Light yellow/Clear
Arachidic	C20	0	2 to <3%	Odor	Slightly characteristic
Myristic	C14	0	<2%		

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