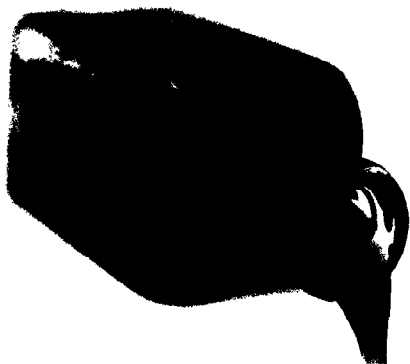


ARGAN OIL

A GREAT SOURCE OF NATURAL GAMMA- TOCOPHEROL, UNSATURATED FATTY ACIDS, SQUALENE AND STEROLS

The unique composition of the argan oil makes it a resource for dietetic and cosmetic usage.

It is an excellent source of **vitamin E (60mg/100g)** and unsaturated fatty acids.



VITAMIN E

Gamma tocopherol makes up 75% of the total tocopherols in Argan oil.

Alpha-Tocopherol and gamma-tocopherol are the two major forms of vitamin E in human plasma and the primary lipid soluble antioxidants.

Research studies suggest that gamma-tocopherol could play a significant role in modulating intracellular antioxidant defence mechanisms. Gamma tocopherol has the ability to protect against nitrogen-based free radicals, which alpha tocopherol cannot do. Nitrogen free radicals play an important role in diseases associated with chronic inflammation, including cancer, heart disease and degenerative brain

disorders such as Alzheimer's disease. Aging is associated with a decline in plasma levels of gamma tocopherol, but not of alpha tocopherol

Researchers found that large doses of alpha tocopherol depleted plasma levels of gamma tocopherol, while the presence of gamma-tocopherol promoted the accumulation of alpha-tocopherol.

Because argan oil is rich in vitamin E, health-conscious consumers can raise their intake without taking in too much fat.

FATTY ACIDS

More than 80% of Argan oil's fatty acids are the unsaturated acids **oleic (43%)** and **linoleic (36%)**.

Oleic fatty acid is a monounsaturated fatty acid that helps reduce blood levels of LDLs ("bad cholesterol") and leaves HDLs ("good cholesterol") unchanged.

Linoleic acid is a polyunsaturated fatty acid or essential fatty acid that cannot be synthesized from our body and thus has to be brought from outside. Polyunsaturated fats help lower the level of LDLs and therefore have often been recommended to reduce coronary heart disease.

SQUALENE

Compared to many other seasoning oils, argan oil contains relatively high contents of **squalene (310mg/100g)**, which is suggested to be protective against skin cancer.

STEROLS

It is believed that the sterols in Argan oil are relatively rare in their combination among the vegetable oils, there are no other vegetable oils with a comparable composition: the **schottenol (48%)**, which exhibits an anticarcinogenic potential and **spinasterol (40%)** that is likely to have anti-tumorigenic and anti-cholesterol effects.

OIL EXTRACTION

Argan oil is produced from the fruits of the Argan tree (*Argania spinosa*), which grows exclusively in Morocco.

Argan nuts contain up to three kernels. The cold-pressed oil extracted from the lightly roasted kernels is used for cooking while the cold pressed oil obtained from non-roasted kernels is used for cosmetic purpose. To produce 1 liter of this rare oil, 30kg of kernels and 16 hours of work are needed. This explains its high cost.



CULINARY AND COSMETIC USE

Argan oil has a vibrantly nutty flavor with fruity overtones. The oil is highly appreciated in cooking, and gives a special taste to salads, vegetables, fishes and cooked meals.

The chemical composition of argan oil makes it a very beneficial product as far as skin care is concerned.

Its high content in vitamin E prevents wrinkles and delays aging. Furthermore, by stimulating cells oxygenation, argan oil restores the hydrophilic layer and skin cells thus making the skin more elastic, smooth and shiny. The rich composition of argan oil in unsaturated acids (79%) ensures a permanent skin hydration therefore moisturizing, revitalizing and nourishing it.

CHEMICAL COMPOSITION (ARGAN OIL)

Fatty acids-		
Myristic	(C 14 : 0)	= 0,15
Pentadecanoic	(C 15 : 0)	≤ 0,05
Palmitic	(C 16 : 0)	12,0-13,0
Palmitoleic	(C 16 : 1)	≤ 0,12
Heptadecanoic	(C 17 : 0)	≤ 0,10
Stearic	(C 18 : 0)	5,0-7,0
Oleic	(C 18 : 1)	43,0 - 49,1
Linoleic	(C 18 : 2)	29,3 - 36,0
Linolenic	(C 18 : 3)	≤ 0,1
Arachidic	(C 20 : 0)	0,3-0,5
Gadoleic	(C 20 : 1)	0,4- 0,5
Behenic	(C 22 : 0)	≤ 0,2
Trans Fatty acids		
C18 :1 T		≤ 0,02
C18 :2 T		= 0,03
Stérols (in % of total sterols)		
Schottenol		44,0 - 49,0 %
Spinasterol		34,0 - 44,0 %
D- 7 - avenasterol		4,0 - 7,0 %
Stigmasta-8,22-dien-3b-ol		3,2 - 5,7 %
Campesterol		≤ 0,4 % ≤ 0,4 %
Cholesterol		
Total sterols		130-230 mg/100 g
Tocopherols (in % of total tocopherols)-		
Alpha-tocopherol -		4,0 - 9,0 %
Beta-tocopherol -		0,1 - 0,3 %
Gamma-tocopherol -		80,0 - 91,0 %
Delta-tocopherol		5,0 - 10,2 %
Total Tocopherols		60 - 90 mg/100 g
Triterpene alcohols		
Mainly tirucallol, b-amyrine, butyrospermol and lupeol		130-180 mg/100g
Stigmasta-3,5-diene -		< 0,05 ppm
Benzo-a-pyrene-		< 0,15 ppb
Palmitic acid in position 2 in the triglycerides		<0,5 %

STORING AND PACKAGING

Shelf life: 24 months after bottling

Storage Recommendations: store in a cool, dark place

Quality: certified organic by ECOCERT www.ecocert.fr

Packaging:

- 1) bulk 25 l in plastic container (culinary)
- 2) bulk 25 l in plastic container (cosmetic)
- 3) delicatessen glass bottles of 250 ml and 500ml (bottled in Switzerland)
- 4) soft gel capsules of 430mg (made in Switzerland)
- 5) natural bar soaps 150 g (made in Switzerland)
- 6) cosmetic argan oil (or serum) (made in Switzerland):
 - plastic bottles of 60ml
 - plastic bottles of 120 ml
 - glass bottles of 60ml
 - glass bottles of 120 ml

