



BioEconomyTM Solutions

CHUFA OIL Virgin Organic

INCI CTFA : Cyperus Esculentus Root Oil
European INCI : Cyperus Esculentus Root Oil
CAS : 223748-92-3
EINECS : 273-313-5

APPLICATIONS

Chufa oil is ideal for the formulation of anti-ageing care creams for body and face. It is also excellent for the development of moisturizing milks and shower gels. Its stability makes it ideal for the preparation of massage and bath oils.

BOTANY

Chufa, or Tiger nut, *Cyperus esculentus*, belongs to the papyrus family. This herbaceous plant can reach 50cm high and grows in very wet grounds or along water, all around the Mediterranean sea. Its rhizomes produce small edible tubers of the size of hazelnuts. Egyptians already consumed them more than 4000 years ago. This plant is very appreciated by Spaniards who prepare a very nourishing vegetable milk, "horchata de chufa" by crushing the hydrated tubers. Chufa is at present little cultivated, mainly in Spain and in east Africa. To obtain virgin organic chufa oil, the plants are grown using organic farming methods. They protect the environment by respecting biological cycles and by refusing pesticides and synthetic fertilizers.

PROPERTIES

The great peculiarity of chufa oil lies in its wealth in omega 9 and in vitamin E. Thanks to their association, the oil has a stability very superior to the average. The antioxidant activity of tocopherol helps the skin to fight against free radicals and thus allows preserving its youth. Omegas 6 present in the oil facilitate the cutaneous cellular renewal. Moreover chufa oil is well known to soothe and heal eczema.

TECHNICAL CHARACTERISTICS

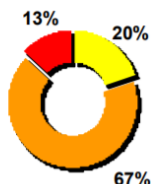
DENSITY AT 20°C: 0,910 - 0,930
ACID VALUE: Max 8mgKOH/g
IODINE VALUE: 70 - 120 gI2/100g
SAPONIFICATION VALUE: 180 - 200 mgKOH/g
VITAMIN E: > 15 mg / 100 g

COLOUR: yellow
ODOUR: characteristic
ASPECT AT 20°C : liquid

AVERAGE FATTY ACID COMPOSITION

Saturated Fatty Acids
Palmitic Acid C16 : 0 10,0 - 20,0 %
Stearic acid C18 : 0 2,0 - 8,0 %
Arachidic acid C20 : 0 < 1,0 %

Unsaturated Fatty Acids
Oleic acid C18 : 1 n-9 60,0 - 75,0 %
Linoleic acid C18 : 2 n-6 8,0 - 18,0 %



■ Saturated Fatty Acids (Cx:0)

■ Monounsaturated Fatty Acids (Cy:1)

■ Polyunsaturated Fatty Acids (Cz:2 and 3)

PRODUCTION AND STORAGE CONDITIONS

MANUFACTURING PROCESS : First cold pressing (T<60°C) - no solvents or chemicals used.
Successive filtrations of the oil through blotting paper.

STORAGE :

Before opening: -keep away from light, heat (T<20°C) and in a dry place.

After opening: -keep the product in the original packaging away from light, heat (T<20°C) and in a dry place

-inert with 0.5 to 1L of gas (ex: nitrogen)/L of packaging,
-close quickly after using (t opening<15min).

PACKAGING : 4,6kg, 23kg Jerry cans

MENTION : ECOCERT SAS F-32600 Inspection - Agriculture farming

1st publication :23/11/2010 Version n°:1 23/11/2010 Revision n°:1 15/03/2011

The above information is given for information purpose and corresponds to the current state of our knowledge.

Please contact us directly for ordering details
BioEconomy Solutions Address 23505 118th St. Ct. E. Buckley, WA 98321
Office: 843.305.4777 <http://www.bioeconomicsolutions.com>