

PARA NUT OIL

> INCI NAME : **Bertholletia Excelsa Nut Oil**

> OBTAINING THE OIL

Bertholletia excelsa oil is prepared from nuts using presses. The oil from the first pressing is successively decanted, filtered and then stored under nitrogen. The oil is finally lightly refined in order to remove its free acidity, which can sometimes reach very high levels in the crude oil, together with the by-products of oxidation (especially peroxides).

> USES

For centuries, it has been commonly used as a food in the Amazonian regions, either as it is, especially in Peru, or grated and mixed with other products (Manioc flour, etc.), in Brazil and elsewhere. The oil as such is used by the local populations and the "country dwellers" for cooking.

The oil is traditionally used in Peru and in other countries of South America to make soap. Nowadays, the oil is used increasingly in cosmetics. It is added to shampoos and "treatment" conditioners, as it is said to make the hair shiny, silky, easy to comb or brush, and soft. It also apparently stabilizes the properties of surfactants and helps to clean the hair. Finally, it is used in moisturizing skin-care products and creams to keep the skin soft and smooth.

ORIGIN

This is one of the highest trees in the Amazonian forest; it can reach a height of 30 metres or more. It grows best in the regions of the forest with a thick, well-drained topsoil that is thus not marshy. The green, alternate leaves are full, oblong and fairly tough.

The spherical to elliptic fruit is very large. It measures 10 to 12 cm in diameter and weighs between 0.5 and 2.5 kg. When ripe, it looks like a sea-urchin shell. It is ligneous in its outer part, and fleshy on the inside. The fruit usually contains 12 to 20 seeds, or "nuts", closely packed together. On average, the trees produce 100 to 300 fruits per year.

> ANALYTIC COMPOSITION

CHARACTERS	A pale yellow oil with a bitter taste
ACID VALUE	≤ 5.0 mg KOH/g
PEROXIDE VALUE	≤ 10.0 meq O ₂ /kg
RELATIVE CONTENT OF β SITOSTEROL	> 50.0 %

THE MAIN COMPONENTS OF THE UNSAPONIFIABLE FRACTION ARE SQUALENE (200 TO 300 MG/100G) AND PHYTOSTEROLS (ABOUT 200 MG/100G): β SITOSTEROL (> 50%) AND STIGMASTEROL (< 10 %).

FATTY ACIDS CONTENT (%)

MYRISTIC ACID:	< 0.2
PALMITIC ACID:	12.0-16.0
PALMITOLEIC ACID:	< 0.5
STEARIC ACID:	9.0-13.0
OLEIC ACID:	31.0-41.0
LINOLEIC ACID:	32.0-43.0
LINOLENIC ACID:	< 0.2

STORAGE : UNDER NITROGEN, PROTECTED FROM LIGHT AND HEAT.

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