### Pistachio nut oil

The Omega fatty acids miracle oil



The pistachio kernel oil has a very balanced content of Omega 9 and Omega 6 fatty acids and is more stable than walnut oil. Like almond oil, pistachio kernel oil has a particularly balanced content of mono- and polyunsaturated fatty acids.

### **Qualities & Usage**

We carry Pistachio nut oil in the following qualities for you

ArtNr.	Quality	Cosmetics	Food	Pharmaceutics
228030	Pistachio nut oil refined	Yes	Yes	

















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## Pistachio tree & pistachio fruit

Pistachio oil is obtained from the peeled fruit of the pistachio tree (lat. Pistacia vera). The pistachio tree is also called pistachio and belongs to the sumac family (Anacardiaceae). The pistachio tree can reach an age of up to 300 years as well as growth heights of up to 12 meters. The roots can reach a depth of up to 15 meters. The stalked leaves are pinnate and up to 20 centimeters long. The bark is rough and somewhat reminiscent of oak bark, the branches grow strongly and rather horizontally. The pistachio is dioecious, i.e. male and female flowers grow on different trees. The flowers are inconspicuous and appear in large numbers in clusters that appear in the leaf axes. When the pistachios ripen, the fruit skin dries out, so that they pop sideways and the view is clear to the actual pistachio. This oval to roundish, one to two-centimeter-long kernel is surrounded by a reddish-brown seed skin and is green or yellow in color.

Pistachio trees can bear fruit for centuries, alternating low yielding and so-called fattening years.

















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## **Cultivation & yield**

In general, pistachios are grown in North America, the Mediterranean region and in South-West and East Asia.

The main growing areas are California in the San Joaquin Valley, Iran, China and Turkey. Other growing areas are in Greece, Italy and Tunisia.

According to the FAO (Food and Agriculture Organization of the United Nations), the global harvest is just over 1 million tons of pistachios annually.

At harvest time in September or October, the pistachios are nowadays shaken from the plantation trees onto a collecting device with the help of mechanical tree shakers so that they do not fall to the ground.

## **Background / history**

Pistachios originally come from Central Asia, in ancient times they conquered the Mediterranean region. At the end of the 19th century the pistachio was imported to the USA and has been cultivated on a large scale in California since the 1970s. According to a legend the Queen of Saba declared pistachios to be an exclusively royal food and forbid the common people to grow them for personal consumption.

Emperor Vitellius is said to have introduced the pistachio to his capital Rome in the 1st century. At that time the pistachio was used as a dye and home remedy for ailments ranging from toothache to cirrhosis of the liver. Due to its high nutritional value and long shelf life, the pistachio was also indispensable on research trips and for traders.





















#### **Article number:**

228030

#### **INCI** name:

Pistacia Vera Seed Oil

#### CAS number:

90082-81-8

#### **Botanical name:**

Pistacia vera L.

#### Usage:

Cosmetics, Food

#### **Certificates:**

Kosher

#### Origin:

We obtain our pistachio kernel oil refined 100% from our own production in California, USA.

# Our packaging







27 kg Canister

### **General durability:**

canister 12 months, drum 18 months, IBC 6 months











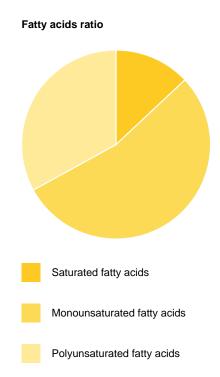






# **Nutritional values & composition**

Nutritional value	(per 100g)		
Energy	3,700 kJ / 900 kcal		
Fat	100 g		
Saturated fatty acids	13 g		
Monounsaturated fatty acids	54 g		
Polyunsaturated fatty acids	33 g		
Composition			
C16:0 Palmitic acid	8 – 15 %		
C18:1 Oleic acid	45 – 58 %		
C18:2 Linoleic acid	27 – 37 %		





















# **Production & description**

Pistachio kernel oil is obtained from the shelled nuts of Pistacia vera L. and then refined.

Yellow to green-yellow oil; practically insoluble in water, easily soluble in dichloromethane and petroleum ether, very slightly soluble in ethanol.

















#### **Gustav Heess**

### Pistachio nut oil refined

Our pistachio kernel oil refined is obtained from the unroasted and peeled pistachios. Our Caloy production unit in Modesto, California is the world's largest producer of refined pistachio kernel oil. Through vertical integration all the way to cultivation, our highly qualified employees ensure consistent quality to meet the everincreasing demands of the market. Our team of agricultural engineers is in daily contact with the farmers in order to select only the highest quality pistachios when purchasing the raw material. In 2016 our new oil mill with three expeller presses from SKET (made in Germany) was put into operation. The expeller presses were developed and built especially for us to produce nut oils in Germany. The crude oil is obtained by gentle mechanical pressing. We work without additional pressing additives. Thus, we produce 100% high-quality pistachio kernel oil with a gentle process.

After pressing, refining takes place in our own specialty refinery, which was newly built in 2013 and expanded in 2017. Here we neutralize the crude oil with our centrifuge before it is filtered with bleaching earth and activated carbon. The oil is then deodorized at low temperature and a vacuum of about 1 mbar before it is finally cooled down to a temperature of 8° Celsius and filtered again (winterized). Only nut oils are processed in our refinery. A mixing with other products is therefore excluded.

We refine at low temperatures, thus preserving all the important vitamins and naturally contained plant substances contained in the oil.

In addition to high product quality, reliability of supply is also a top priority. Therefore, we maintain large storage capacities in the USA and in various European countries. This enables us to ensure supply anywhere, anytime and just in time. We not only promise security of supply - we can guarantee it.

Our 6-stage system ensures seamless quality control:

- 1. by our agricultural engineers in the fields
- 2. by our own Caloy laboratory on receipt of the pistachios
- 3. after pressing to oil
- 4. in-process controls at each refining stage
- 5. final inspection of the oil after completed refining process
- before delivery to the customer by our Gustav Heess laboratory in Germany, officially accredited according to DIN ISO 17025

















## Pistachio nut oil

refined

# **Usage**

- suitable for all leaf salads or smoked salmon
- Pistachio kernel oil is also often used in desserts
- Pistachio kernel oil is well suited for refining vegetables, pasta, fish, fruit, avocado, pesto, rice, potatoes, bread or cheese

Food







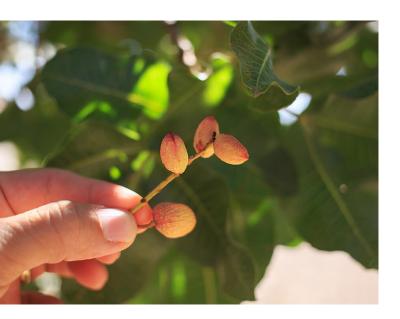












# Sustainability & responsibility

Our own production Caloy is strategically located in the middle of the growing area. This saves  $\mathrm{CO}_2$  through short transport distances and guarantees a fresh quality of the pistachios.















