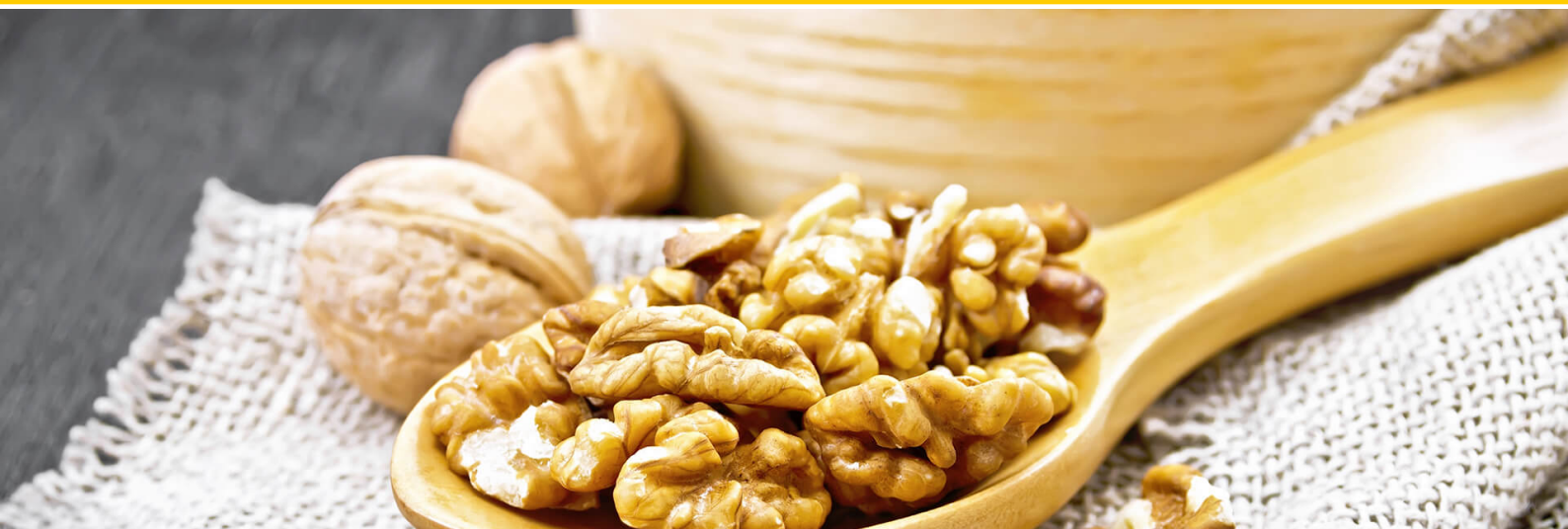


Walnut oil

Valuable nut oil with Omega 3 fatty acids



Walnut oil is a high-quality nut oil and is characterized by a particularly high content of triglycerides of unsaturated fatty acids.

Qualities & Usage

We carry Walnut oil in the following qualities for you

Art.-Nr.	Quality	Cosmetics	Food	Pharmaceutics
340030	Walnut oil refined	Yes	Yes	Yes
340020	Walnut oil cold pressed	Yes	Yes	
340025	Walnut oil pressed toasted	Yes	Yes	
340120	Organic walnut oil cold pressed	Yes	Yes	
340125	Organic walnut oil pressed toasted	Yes	Yes	

The brown walnuts are very popular (raw material for e.g. ice cream); equally, walnut oil is used in the food industry as a valuable edible oil (refining salads). In the pharmaceutical industry, walnut oil is used as a basis for healing ointments. In the cosmetic industry it is used in creams and hair shampoos. Further applications for walnut oil are the production of oil paints and the treatment of wooden furniture.



Walnut oil

Valuable nut oil with Omega 3 fatty acids



Walnut tree & walnut

The walnut tree, which belongs to the walnut family (Juglandaceae), is a deciduous, fast growing and spreading tree. It can reach growth heights of up to 30 meters, the trunk reaches a diameter of 2 meters. The bark is smooth and ash-grey in the first few years and develops into a deep fissured, dark to black-grey bark as it ages. The dark green leaves reach a length of 6 to 15 cm.

The greenish-yellow flowers can be seen on the tree between April and June. After the blooming period the 4 to 6 cm large, round, green fruits are formed. This fruit shell bursts open when the fruit reaches maturity, leaving behind the wrinkled, light brown core. This core can vary in shape and size. It consists of two fused halves and is heavily lignified. The shape ranges from round, oval, egg-shaped to beak-shaped and reaches lengths of 2.5 cm to 8 cm and a width of 2.5 cm. The nuts ripen between September and October. When they reach maturity, the nuts fall to the ground by themselves. The walnuts are then collected, dried and opened with special cracking machines.

The tree bears fruit only from an age of 10 to 20 years but reaches an age of up to 160 years.

The optimal location for a walnut tree offers plenty of light and heat, but also periods of cold, which the tree needs for the development of its sprouts. The soil should be loamy and fertile.

To produce one liter of walnut oil, about two to three kilograms of walnuts are needed.



Walnut oil

Valuable nut oil with Omega 3 fatty acids

Cultivation & yield

By far the largest supplier of walnuts is the USA (California). Followed by France, India and China. Breeding by Californian farmers has contributed significantly to the quality of today's walnuts. Already after the First World War, they bred special varieties that could also tolerate a colder climate. This pioneering work secured the area a big lead in the business of the high-quality nut, which no one has caught up with until today. Currently almost 65% of all walnuts worldwide and a total of over 200,000 tons per year are grown in California. The main harvesting season in California is between August and November, depending on variety and location.

Apart from the growing areas, the walnut tree is native to Southern and Central Europe, Asia Minor and Central Asia, North Africa, China and Japan. The tree is cultivated in Germany, its cultivation limit is roughly the same as the wine cultivation limit. In North America a variety, the black walnut (*Juglans nigra* L.), is cultivated. Because of their extreme hardness, these nuts can only be opened with special nutcrackers and are very popular in pastry shops and for ice cream. The European walnut tree is not only valued for its nuts, but also as a valuable furniture wood.

Background / history

The walnut has been cultivated by humans as a crop for over 9,000 years. Originally it is native to Central Asia, then it reached Europe via Greece and with the emigrants also the American continent, California. There they found perfect conditions for cultivation. In 1867 the first walnut plantation was established in California.

Even in ancient Greece the walnut was valued and was considered the food of the gods. It was also used as a symbol of fertility. Thus, as soon as a bride entered the bridal chamber, nuts were distributed among the wedding guests so that Zeus would give the couple many children.



Walnut oil

refined

**Article number:**

340030

INCI name:

Juglans Regia Seed Oil

CAS number:

84012-43-1 / 8024-09-7

Botanical name:

Juglans regia

Usage:

Cosmetics, Food, Pharmaceuticals

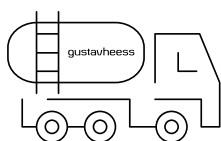
Certificates:

Kosher

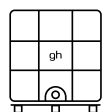
Origin:

Our high-quality refined walnut oil is 100% from California.

Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

General durability:

canister 12 months, drum 18 months, IBC 6 months



Walnut oil

refined

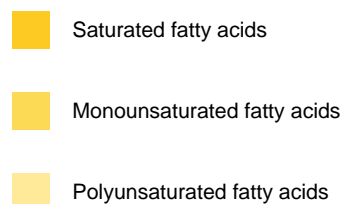
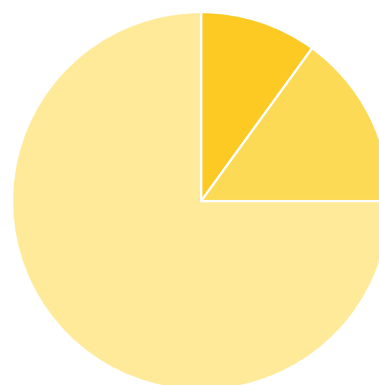
Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	10 g
Monounsaturated fatty acids	15 g
Polyunsaturated fatty acids	75 g

Composition

C18:1 Oleic acid	14 – 21 %
C18:2 Linoleic acid	54 – 65 %
C18:3 Linolenic acid	9 – 15 %

Fatty acids ratio



Walnut oil

refined



Production & description

Refined walnut oil is the fatty oil obtained from the seeds of the walnut tree by pressing and subsequent refining. (*Juglans regia*).

Walnut oil refined is a light yellow to golden yellow oil with a mild, slightly nutty to neutral taste and neutral smell.



Walnut oil

refined

Gustav Heess

Walnut oil refined

To produce our walnut oil we only use the walnuts of the so-called "real walnut" tree, also called "Juglandaceae" in Latin. With their many years of experience, Californian farmers are world leaders in the cultivation of walnuts. That is why we produce our walnut oil refined using 100% real Californian walnuts. Our own oil mill and refinery at our production unit Caloy in Modesto, California, is the world's largest producer of refined walnut oil. Through vertical integration up to the cultivation stage, our highly qualified employees ensure consistent quality to meet the ever-increasing demands of the market. Our team of agricultural engineers is in daily contact with the farmers in order to select only the highest quality real walnuts when sourcing the raw material. In 2016 our new oil mill 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. In this process we work without additional pressing additives. Thus, we produce 100% high-quality walnut 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.

We refine at low temperatures, thus preserving all the important vitamins and naturally contained plant substances of the oil. Thanks to this treatment, the walnut oil obtained has a longer shelf life, but is more neutral in taste and odor than cold-pressed walnut oil.

Only nut oils are processed in our refinery. A mixing with other products is therefore excluded. No other producer in the world has specialized in nut oils as we do and offers a fully integrated production process from raw material to pressing and refining under one roof. This enables us to offer nut oils of a quality well above that available on the market.

In addition to high product quality, delivery reliability 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 and delivery - we can guarantee it.

Our 6-stage system ensures seamless quality control:

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



Walnut oil

refined

Usage

- The polyunsaturated fatty acid Omega 3 contributes to the health of the cardiovascular system.
- The polyunsaturated fatty acids regulate the cholesterol level very well – without any side effects. Thus, walnut oil represents the healthy alternative to medicines, which should lower the cholesterol level
- The balanced mixture of monounsaturated and polyunsaturated fatty acids and omega-3 fatty acids makes walnut oil a superfood and is therefore used by athletes and vegetarians
- Walnut oil strengthens the immune system because its composition of different vitamins of the B and E group and fatty acids have a disinfecting and anti-inflammatory effect.
- Regular consumption of walnut oil reduces the risk of cardiovascular diseases.
- Studies show that walnut oil can lower blood pressure and keep it at a healthy level.
- Walnut oil is well suited for cold dishes and is particularly popular in French cuisine.
- Suitable for refining fish dishes, vegetables, soups or salad dressings
- Helps with detoxification and healthy, long-term weight loss

Food



Walnut oil

refined



Sustainability & responsibility

We only use real walnuts from California. California has been growing walnuts for more than a century. 99% of all walnuts produced in the USA come from California's fertile plantations. With its deep and nutrient-rich loamy soil and over 300 days of sunshine a year, the Central Valley offers the ideal growing conditions for walnut trees. The Californian walnut industry consists of approximately 4,800 mostly small and medium-sized farms that have been growing walnuts for several generations. We are in constant contact with the walnut growers and maintain long-term supply relationships. Our suppliers are members of the California Walnut Commission. This organization supports the walnut growers in various areas. This includes research, cooperation with universities and training. Two different types of training are offered. The FSMA (Food Safety Modernization Act) Grower Training and the GAP Trainings (Good Agricultural Practices). In these trainings, knowledge about sustainable soil management and the reduction of water consumption is taught.

Waste is minimized by using all by-products of walnut cultivation. In addition to the walnuts, the two by-products shell and skin are used as animal feed and as stable bedding.

Due to our strategically chosen production site, the transport distances from the field to the oil mill are particularly short. In addition to this location advantage, we offer fully integrated production under one roof. This means that the entire process from raw material, pressing and refining takes place under one roof and is constantly monitored by our quality control department. Quality also means avoiding and therefore we completely avoid pressing

additives during the pressing process.

Many market competitors only ever carry out individual production steps, e.g. only pressing or only refining. Therefore, they are dependent on the preliminary products of outsourced suppliers.

We are convinced that for a sustainable and high-quality refined walnut oil, a fully integrated production is required, as this is the only way to guarantee the high oil quality and to protect the environment.



Walnut oil

cold pressed

**Article number:**

340020

INCI name:

Juglans Regia Seed Oil

CAS number:

84012-43-1 / 8024-09-7

Botanical name:

Juglans regia

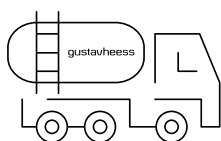
Usage:

Cosmetics, Food

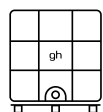
Certificates:

Kosher, NATRUE

Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

General durability:

canister 12 months, drum 18 months, IBC 6 months



Walnut oil

cold pressed

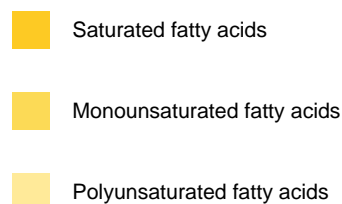
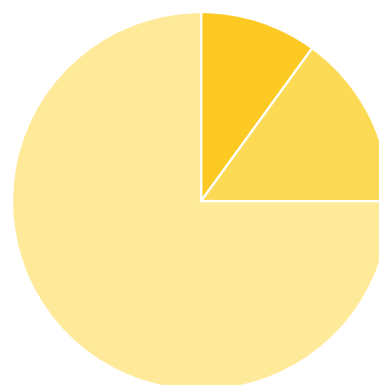
Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	10 g
Monounsaturated fatty acids	15 g
Polyunsaturated fatty acids	75 g

Composition

C18:1 Oleic acid	14 – 21 %
C18:2 Linoleic acid	54 – 65 %
C18:3 Linolenic acid	9 – 15 %

Fatty acids ratio



Walnut oil

pressed toasted

**Article number:**

340025

INCI name:

Juglans Regia Seed Oil

CAS number:

84012-43-1 / 8024-09-7

Botanical name:

Juglans regia

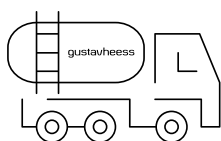
Usage:

Cosmetics, Food

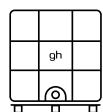
Certificates:

Kosher, NATRUE

Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

General durability:

canister 12 months, drum 18 months, IBC 6 months



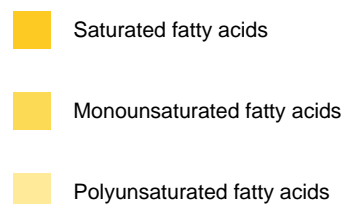
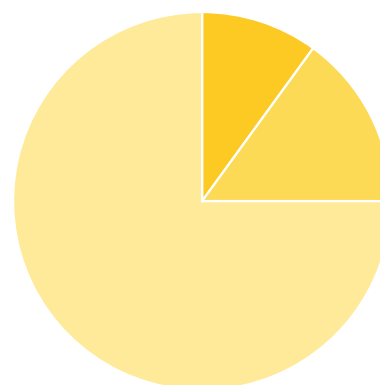
Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	10 g
Monounsaturated fatty acids	15 g
Polyunsaturated fatty acids	75 g

Composition

C18:1 Oleic acid	14 – 21 %
C18:2 Linoleic acid	54 – 65 %
C18:3 Linolenic acid	9 – 15 %

Fatty acids ratio



Organic walnut oil

cold pressed

**Article number:**

340120

INCI name:

Juglans Regia Seed Oil

CAS number:

84012-43-1 / 8024-09-7

Botanical name:

Juglans regia

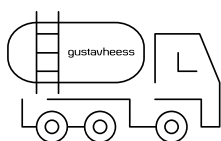
Usage:

Cosmetics, Food

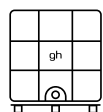
Certificates:

Kosher, EU organic

Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

General durability:

canister 12 months, drum 18 months, IBC 6 months



Organic walnut oil

cold pressed

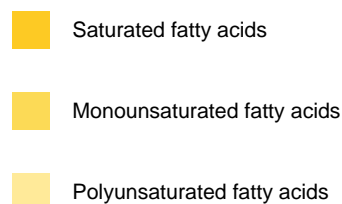
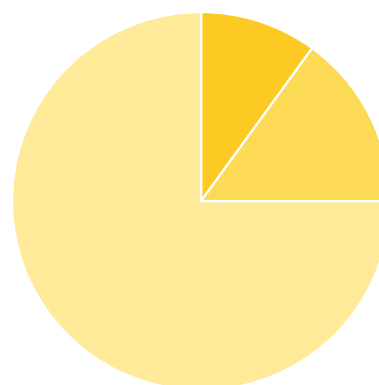
Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	10 g
Monounsaturated fatty acids	15 g
Polyunsaturated fatty acids	75 g

Composition

C18:1 Oleic acid	14 – 21 %
C18:2 Linoleic acid	54 – 65 %
C18:3 Linolenic acid	9 – 15 %

Fatty acids ratio



Organic walnut oil

pressed toasted

**Article number:**

340125

INCI name:

Juglans Regia Seed Oil

CAS number:

84012-43-1 / 8024-09-7

Botanical name:

Juglans regia

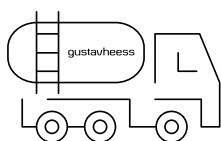
Usage:

Cosmetics, Food

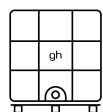
Certificates:

Kosher, EU organic

Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

General durability:

canister 12 months, drum 18 months, IBC 6 months



Organic walnut oil

pressed toasted

Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	10 g
Monounsaturated fatty acids	15 g
Polyunsaturated fatty acids	75 g

Composition

C18:1 Oleic acid	14 – 21 %
C18:2 Linoleic acid	54 – 65 %
C18:3 Linolenic acid	9 – 15 %

Fatty acids ratio

