

# Almond oil

Elixir for health and beauty



Almonds have an oil content of 47-61%. The oil has a very high content of oleic acid, the classical oil among the natural cosmetic oils.

## Qualities & Usage

We carry Almond oil in the following qualities for you

| Art.-Nr. | Quality                             | Cosmetics | Food | Pharmaceutics |
|----------|-------------------------------------|-----------|------|---------------|
| 208031   | Almond oil refined Ph. Eur.         | Yes       | Yes  | Yes           |
| 208020   | Almond oil cold pressed             | Yes       | Yes  | Yes           |
| 208131   | Organic almond oil refined Ph. Eur. | Yes       |      | Yes           |
| 208120   | Organic almond oil cold pressed     | Yes       | Yes  | Yes           |



# Almond oil

Elixir for health and beauty



## Almond Tree & almond Fruit

The almond tree belongs to the family Rosaceae and is a deciduous, upright, loosely foliated tree that can reach a height of 2 to 11 meters. The tree starts flowering as early as January and lasts until April. From July to August the leathery, firm drupes ripen. These tear up in the middle of the belly seam as soon as the ripeness is reached. The stone kernel that appears afterwards must be cracked to get to the almond. These have a thin, orange-brownish seed coat and a cream-coloured kernel. One differentiates between the sweet and the bitter almond. Only the sweet almonds are used to produce oil. The almond tree thrives best in a climate with long, warm and dry summers and mild, short and humid winters with short frosts. The average life expectancy of an almond tree is 70-80 years.



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## Cultivation & yield

The world's largest growing area for almonds is in California. This is where around 80 % of all almonds are harvested. But almonds are also grown in the Mediterranean, Pakistan and Iran. The worldwide annual production in 2018 was almost 1.25 million tons.

The main harvesting period is from September to October.

## Background / history

Mankind has been cultivating almond trees for around 4000 years. Then as now, people were aware of the valuable properties of the almond. Thus, the ancient Romans threw the rich nuts at newly married couples to help create a new generation. The ancient Egyptians also baked their bread for the pharaohs with almonds.

It is highly likely that the almond tree comes from Southwest Asia. The almond trees did not find their way to California until the 18th century.



# Almond oil

refined Ph. Eur.

**Article number:**

208031

**INCI name:**

Prunus Amygdalus Dulcis Oil

**CAS number:**

8007-69-0 / 90320-37-9

**Botanical name:**

Prunus Dulcis

**Usage:**

Cosmetics, Food, Pharmaceuticals

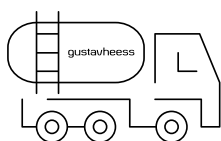
**Certificates:**

Kosher, NATRUE

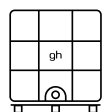
**Origin:**

Our refined almond 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



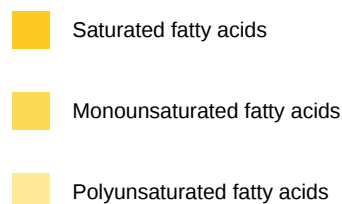
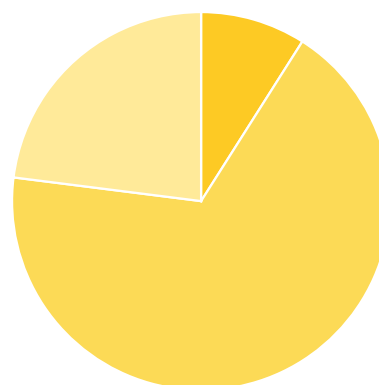
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 9 g                 |
| Monounsaturated fatty acids | 68 g                |
| Polyunsaturated fatty acids | 23 g                |

### Composition

|                     |           |
|---------------------|-----------|
| C16:0 Palmitic acid | 4 – 9 %   |
| C18:1 Oleic acid    | 62 – 86 % |
| C18:2 Linoleic acid | 7 – 30 %  |

Fatty acids ratio



# Almond oil

refined Ph. Eur.



## Production & description

Refined almond oil is the fatty oil obtained from the ripe seeds of *Prunus dulcis* (Miller) D.A. Webb var. *dulcis* or *Prunus dulcis* (Miller) D.A. Webb var. *amara* (D.C.) Buchheim or a mixture of both varieties by cold expression. It is then refined.

Refined almond oil is a light yellow, low viscosity oil with a pleasant, slightly nutty almond taste and characteristic smell.



# Almond oil

refined Ph. Eur.

Gustav Heess

## Almond oil refined Ph. Eur.

Our Caloy production unit in Modesto, California is the world's largest producer of almond oil. Through vertical integration all the way to cultivation, 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 almonds when sourcing the raw materials. 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 in Germany. The crude oil is obtained by gentle mechanical pressing. We work without additional pressing aids. Thus, we produce 100% high-quality almond 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 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 in a vacuum of about 1 mbar before it is finally cooled 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, 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 do 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 almonds
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 officially DIN EN ISO/IEC 17025 accredited Gustav Heess laboratory in Germany

All production steps and analysis comply with the requirements of the Pharmacopoeia Europaea (Ph. Eur.).



# Almond oil

refined Ph. Eur.

## Usage

- Versatile base oil for all skin types
- Penetrates well into the skin and greases the skin
- Soothing for rough, scaly and dry skin
- Very good massage oil
- Use in baby care products, lip balms and hair care preparations

- High quality salad oil and for cooking, frying and deep-frying
- Suitable for the preparation of desserts due to its almond flavour
- Part of the Mediterranean diet due to the monounsaturated fatty acid distribution and therefore very healthy

- Use as ointment component as well as solvent and dispersion agent
- Active ingredient carrier in oily eye drops

### Cosmetics

### Food

### Pharmaceutics



# Almond oil

refined Ph. Eur.



## Sustainability & responsibility

In California, more than 90% of almond farms are family businesses, most of them are managed in the third or fourth generation. In addition, almost three quarters of almond farms are smaller than 40 hectares. With the Almond Sustainability Program (CASP) introduced in 2009, sustainability measures are implemented in the areas of water, air quality, energy and land (nutrient use, pest control and bee health). Water consumption is a particularly important issue in the cultivation of almonds. It was reduced by 33% per pound of almonds through the use of micro-irrigation systems, irrigation on demand rather than on time, and by optimizing irrigation through soil maps.

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

Bees are the most important helpers on the almond farm, as they are needed for pollinating the almond blossoms. Through the program "Honey Bee Best Management Practices (BMPs)" the almond farmers actively support bees and as a measure, for example, 93% of the farmers offer the bees clean water to drink and cool down during the pollination period.

Our own production facility Caloy is strategically located in the middle of the growing area. This saves CO<sub>2</sub> through short transport distances and guarantees a fresh quality of almonds.



# Almond oil

cold pressed

**Article number:**

208020

**INCI name:**

Prunus Amygdalus Dulcis Oil

**CAS number:**

8007-69-0 / 90320-37-9

**Botanical name:**

Prunus Dulcis

**Usage:**

Cosmetics, Food, Pharmaceuticals

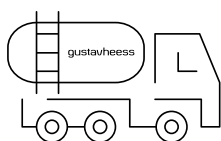
**Certificates:**

Kosher, NATRUE

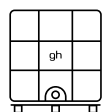
**Origin:**

Our cold pressed almond 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



# Almond oil

cold pressed

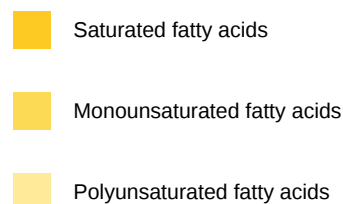
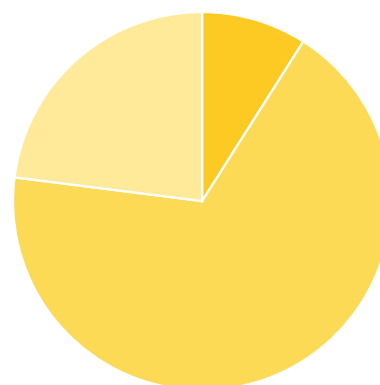
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 9 g                 |
| Monounsaturated fatty acids | 68 g                |
| Polyunsaturated fatty acids | 23 g                |

### Composition

|                     |           |
|---------------------|-----------|
| C16:0 Palmitic acid | 4 – 9 %   |
| C18:1 Oleic acid    | 62 – 86 % |
| C18:2 Linoleic acid | 7 – 30 %  |

Fatty acids ratio



# Almond oil

cold pressed



## Production & description

Cold pressed almond Oil is the cold pressed fatty oil obtained by cold expression from the ripe seeds of *Prunus dulcis* (Miller) D.A. Webb var. *dulcis* or *Prunus dulcis* (Miller) D.A. Webb var. *amara* (D.C.) Buchheim or a mixture of the two varieties.

Almond oil cold pressed is a yellow, clear liquid.



# Almond oil

## cold pressed

Gustav Heess

## Almond oil cold pressed

We produce our almond oil cold pressed in our production unit Caloy in Modesto, California. Our production is the world's largest producer of almond oil.

For our high quality almond oil cold pressed we only use the selected high quality ripe almonds of the sweet almond varieties *Prunus dulcis* (Miller) D.A. Webb var. *dulcis* or *Prunus dulcis* (Miller) D.A. Webb var. *amara* (D.C.) Buchheim or a mixture of both. We have been working with our Californian farmers for many years. In regular audits, our quality management checks the cultivation conditions and compliance with our agreements. This enables us to guarantee not only permanent availability, but also consistently high quality.

We press our almond oil cold pressed in our own oil mill with four presses individually developed and manufactured for us by the company "Kernkraft" in Germany. These unique, technically new presses enable us to achieve the highest quality cold pressing of almonds.

Many oil mills have frequent product changes and therefore use their universal presses for different oils. We focus exclusively on nut oils, thus avoiding any mixing. Using our special presses for nut oils enables us to produce a higher quality than with universal presses. We obtain our almond oil cold pressed by gentle mechanical pressing. We work without additional pressing aids. Thus, we produce 100% high-quality almond oil with a gentle process.

As world market leader for almond oil, product quality and delivery reliability are particularly important to us. For this purpose, 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 quality control system ensures seamless quality control:

1. by our agricultural engineers on the field
2. by our own Caloy laboratory at the delivery of almonds
3. by monitoring the gentle pressing process with our special nut presses
4. after gentle pressing to oil
5. final inspection of the oil before it is stored in our own tanks
6. before delivery to the customer by our officially DIN EN ISO/IEC 17025 accredited Gustav Heess laboratory in Germany



# Almond oil

cold pressed

## Usage

- Versatile base oil for all skin types
- Penetrates well into the skin and greases the skin
- Soothing for rough, scaly and dry skin
- Very good massage oil
- Use in baby care products, lip balms and hair care preparations

- High quality salad oil and cooking oil, frying at low temperatures
- Suitable for the preparation of desserts due to its almond flavour
- Part of the Mediterranean diet due to the monounsaturated fatty acid distribution and therefore very healthy

### Cosmetics

### Food



# Almond oil

cold pressed



## Sustainability & responsibility

In California, more than 90% of almond farms are family businesses, which are mostly managed in the third or fourth generation. In addition, almost three quarters of almond farms are smaller than 40 hectares. With the Almond Sustainability Program (CASP) introduced in 2009, sustainability measures are implemented in the areas of water, air quality, energy and land (nutrient use, pest control and bee health). Water consumption is a particularly important issue in the cultivation of almonds. This has been reduced by 33% using micro-irrigation systems, irrigation on demand rather than on time, and by optimising irrigation through soil maps per 0.5 kg of almonds.

Waste is minimized by using all the by-products of almond cultivation. Besides the almond kernel, the two by-products shell and skin are used as animal feed and as stable bedding.

Bees are the most important helpers on the almond farm, as they are needed for pollinating the almond blossoms. Through the Honey Bee Best Management Practices (BMPs) program, the almond farmers actively support bees and as one measure, 93% of the farmers offer the bees clean water to drink and cool down during the pollination period.

Our own production facility Caloy is strategically located in the middle of the growing area. This saves CO<sub>2</sub> through short transport distances and guarantees a fresh quality of the almonds.



# Organic almond oil

refined Ph. Eur.

**Article number:**

208131

**INCI name:**

Prunus Amygdalus Dulcis Oil

**CAS number:**

8007-69-0 / 90320-37-9

**Botanical name:**

Prunus Dulcis

**Usage:**

Cosmetics, Pharmaceuticals

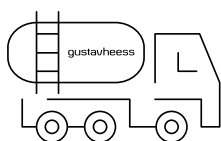
**Certificates:**

EU organic, Kosher

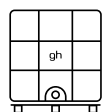
**Origin:**

Our refined almond oil organic 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



# Organic almond oil

refined Ph. Eur.

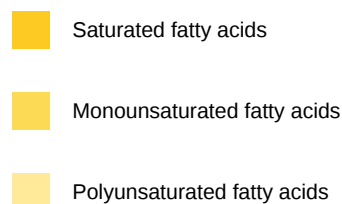
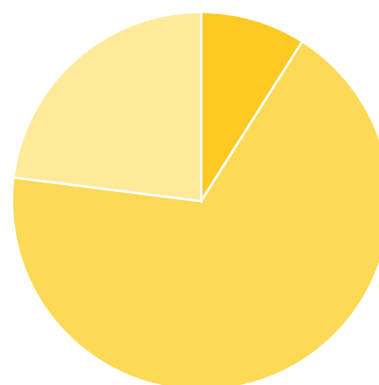
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 9 g                 |
| Monounsaturated fatty acids | 68 g                |
| Polyunsaturated fatty acids | 23 g                |

### Composition

|                     |           |
|---------------------|-----------|
| C16:0 Palmitic acid | 4 – 9 %   |
| C18:1 Oleic acid    | 62 – 86 % |
| C18:2 Linoleic acid | 7 – 30 %  |

Fatty acids ratio



# Organic almond oil

refined Ph. Eur.



## Production & description

Almond oil refined organic is the fatty oil obtained from the ripe seeds of *Prunus dulcis* (Miller) D.A. Webb var. *dulcis* or *Prunus dulcis* (Miller) D.A. Webb var. *amara* (D.C.) Buchheim or a mixture of both varieties by cold expression. It is then refined.

Almond oil refined organic Ph. Eur. is a pale yellow, clear liquid.



# Organic almond oil

refined Ph. Eur.

Gustav Heess

## Organic almond oil refined Ph. Eur.

Our Caloy production unit in Modesto, California is the world's largest producer of almond oil. Through vertical integration all the way to cultivation, our highly qualified employees ensure consistent quality to meet the ever-increasing demands of the organic market. Our team of agricultural engineers is in daily contact with the farmers in order to select only the highest quality organic almonds when sourcing the raw materials.

Many small differences make our almond oil refined organic so special.

Our organic refined almond oil is produced separately from our other nut oils. Therefore, a mixing during production is impossible and you are guaranteed to receive 100% organic refined almond oil.

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 in Germany to produce nut oils. The crude oil is obtained by gentle mechanical pressing. We work without additional pressing aids. Thus, we produce 100% high-quality almond 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 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 under a vacuum of about 1 mbar before it is finally cooled 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, 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 do not only promise security of supply – we can guarantee it.

Our 6-stage system ensures seamless quality control:

1. by our agricultural engineers on the field
2. by our own Caloy laboratory on receipt of the almonds
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 officially DIN EN ISO/IEC 17025 accredited Gustav Heess laboratory in Germany

In addition to our 6-stage quality control system, our almond oil refined organic is regularly controlled by the American organic control authority according to NOP and additionally by the European organic control authority according to EU BIO. Through these double controls we can not only promise quality, but also guarantee 100% organic quality.

All production steps and analyses comply with the requirements of the Pharmacopoeia Europaea (Ph. Eur.).



# Organic almond oil

refined Ph. Eur.

## Usage

- Versatile base oil for all skin types
- Penetrates well into the skin and greases the skin
- Soothing for rough, scaly and dry skin
- Very good massage oil
- Use in baby care products, lip balms and hair care preparations

Cosmetics

- Use as ointment component as well as solvent and dispersion agent
- Active ingredient carrier in oily eye drops

Pharmaceutics



# Organic almond oil

refined Ph. Eur.



## Sustainability & responsibility

In California, more than 90% of almond farms are family businesses, most of them are managed in the third or fourth generation. In addition, almost three quarters of almond farms are smaller than 40 hectares. With the Almond Sustainability Program (CASP) introduced in 2009, sustainability measures are implemented in the areas of water, air quality, energy and land (nutrient use, pest control and bee health). Water consumption is a particularly important issue in the cultivation of almonds. It was reduced by 33% per pound of almonds through the use of micro-irrigation systems, irrigation on demand rather than on time, and by optimizing irrigation through soil maps.

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

Bees are the most important helpers on the almond farm, as they are needed for pollinating the almond blossoms. Through the program "Honey Bee Best Management Practices (BMPs)" the almond farmers actively support bees and as a measure, for example, 93% of the farmers offer the bees clean water to drink and cool down during the pollination period.

Our own production facility Caloy is strategically located in the middle of the growing area. This saves CO2 through short transport distances and guarantees a fresh quality of almonds.



# Organic almond oil

cold pressed

**Article number:**

208120

**INCI name:**

Prunus Amygdalus Dulcis Oil

**CAS number:**

8007-69-0 / 90320-37-9

**Botanical name:**

Prunus Dulcis

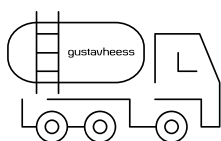
**Usage:**

Cosmetics, Food, Pharmaceuticals

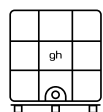
**Certificates:**

EU organic, Kosher

## 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 almond oil

cold pressed

## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 9 g                 |
| Monounsaturated fatty acids | 68 g                |
| Polyunsaturated fatty acids | 23 g                |

### Composition

|                     |           |
|---------------------|-----------|
| C16:0 Palmitic acid | 4 – 9 %   |
| C18:1 Oleic acid    | 62 – 86 % |
| C18:2 Linoleic acid | 7 – 30 %  |

Fatty acids ratio

