

# Rapeseed oil

Versatile and healthy



Today's rapeseed oil is characterized by few saturated fats, high content of oleic acid and a high content of omega-3 fatty acids. This makes it very healthy and the most popular edible oil in Germany.

## Qualities & Usage

We carry Rapeseed oil in the following qualities for you

Art.-Nr.	Quality	Cosmetics	Food	Pharmaceutics
214031	Rapeseed oil refined solvent extracted Ph. Eur.	Yes	Yes	Yes
214020	Rapeseed oil virgin food		Yes	
214122	Organic rapeseed oil refined		Yes	
214120	Organic rapeseed oil cold pressed		Yes	



# Rapeseed oil

Versatile and healthy



## Rape plant & rape seed

Rape (*Brassica napus*) belongs to the cruciferous family like turnip and cabbage, but can reach a height of up to 150 cm. The annual green rapeseed plant is usually cultivated in Europe as winter rapeseed. WOSR is sown between July and October and then remains on the field for up to a year. Compared to summer rapeseed, winter rapeseed is characterized by a higher yield due to the longer growing season. WOSR is sown in late summer. The flowering period of rapeseed plants is 3 weeks and is between April and July depending on the variety and geographical location. First the main shoot (middle shoot) flowers bright yellow, then the side shoots flower. After flowering, the seeds ripen in the pods. These are green at the beginning, 5 to 10 cm long and contain between 20 and 35 seeds. Shortly before the harvest in early summer, the green pods ripen and turn brown. The rapeseed plant also loses its leaves. The grains obtained are black and round and have a thousand-grain mass of about 5 grams.

The rapeseed plant thrives best in nutrient-rich, deep soils. Very clayey soils with a strong tendency to stagnant moisture are unsuitable for rape cultivation.



# Rapeseed oil

Versatile and healthy

## Cultivation & yield

The world's largest growers of rapeseed are Canada, China, India, France, Germany and Poland. The global harvest is about 70 million tonnes. The main harvest time is early summer.

Depending on the processing method, approx. 66% of the rape seed mass is produced as by-products (rape cake, rape expeller, rape extraction meal). These by-products are mainly used as animal feed. Another by-product of rapeseed oil processing to biodiesel is Glycerine.

## Background / history

Rapeseed is a very old crop plant in temperate latitudes. The country of origin is uncertain, probably it is located in Eurasia, where the plant is mentioned as early as 2000 BC. The name rapeseed oil is derived from the medieval word "Rübse"(= rape).

For centuries, rapeseed oil was characterized by its high erucic acid content, which not only impeded human nutrition (pathological changes in the heart muscle, fatty degeneration of the heart), but also caused health problems in animals (reduced appetite, lower weight, enlarged thyroid). Therefore, rapeseed oil was first used as lamp oil. It was only through the breeding of low-erucic acid varieties in the 1970s that rapeseed oil became suitable for human consumption (1973 first approval of a low-erucic acid rapeseed variety in Germany by the Bundessortenamt).



# Rapeseed oil

refined solvent extracted Ph. Eur.

**Article number:**

214031

**INCI name:**

Brassica Campestris Seed Oil

**CAS number:**

8002-13-9

**Botanical name:**

Brassica napus L. und Brassica campestris L.

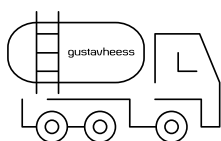
**Usage:**

Cosmetics, Food, Pharmaceuticals

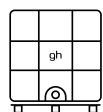
**Certificates:**

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



# Rapeseed oil

refined solvent extracted Ph. Eur.

## Nutritional values & composition

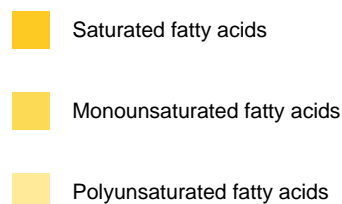
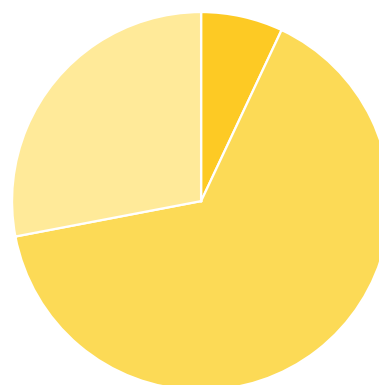
### Nutritional value (per 100g)

Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	7 g
Monounsaturated fatty acids	65 g
Polyunsaturated fatty acids	28 g

### Composition

C18:1 Oleic acid	50 – 67 %
C18:2 Linoleic acid	16 – 30 %
C22:1 Erucic acid	max. 2 %

### Fatty acids ratio



# Rapeseed oil

refined solvent extracted Ph. Eur.

Gustav Heess

## Rapeseed oil refined solvent extracted Ph. Eur.

The production of our refined rapeseed oil begins with the harvesting of the rapeseed in summer, when the pods are brown and easy to open. After cleaning the seeds, the hulls are removed, exposing the kernels and extracting the hulls as a by-product. The hulled rapeseed kernels are then processed into flakes to improve their surface structure. During the subsequent conditioning process, the moisture content of the flakes is adjusted to increase the oil yield. The crude oil is separated from the solid components, the press cake, by purely mechanical extraction. Finally, the crude oil is filtered to remove natural suspended solids and ensure high quality and purity, which is confirmed in our DIN ISO 17025 certified laboratory.

Our refined rapeseed oil meets the requirements of the European Pharmacopoeia and is continuously monitored for the highest quality through a special test plan. Through diversified supply chains, which include various seed sources as well as oil mill and refinery locations, we ensure a reliable supply, even in the event of regional incidents such as extreme weather events.



# Rapeseed oil

refined solvent extracted Ph. Eur.

## Usage

- In skin care, it is used for its nourishing and moisturizing properties, which can help improve the skin barrier
- Used in hair care products to strengthen hair, prevent split ends and provide a natural shine
- Commonly used in soap making due to its foaming abilities and gentle cleansing of the skin
- Used in lip balms to soften and nourish dry and chapped lips
- Popular as a carrier oil

Rapeseed oil, which contains both polyunsaturated and monounsaturated fatty acids, is versatile - both for preparing cold dishes and for cooking, baking and deep-frying at high temperatures, which is facilitated by its low water content. In the preparation of cold dishes, such as salads, it is valued for its rich content of linoleic acid and linolenic acid.

- Used in pharmaceutical ointments and creams to optimize their consistency and promote the skin penetration of active ingredients
- In the production of pharmaceutical soft capsules, rapeseed oil acts as a safe and inert filling material for oil-soluble active ingredients

### Cosmetics

### Food

### Pharmaceutics





# Rapeseed oil

virgin food

**Article number:**

214020

**INCI name:**

Brassica Campestris Seed Oil

**CAS number:**

8002-13-9

**Botanical name:**

Brassica napus L. und Brassica campestris L.

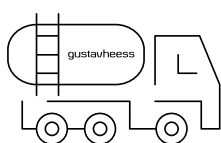
**Usage:**

Food

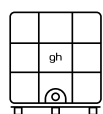
**Certificates:**

Kosher, NATRUE

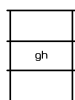
## Our packaging



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





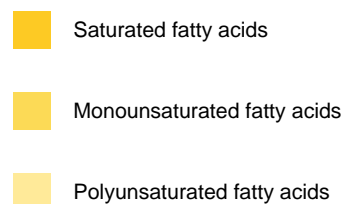
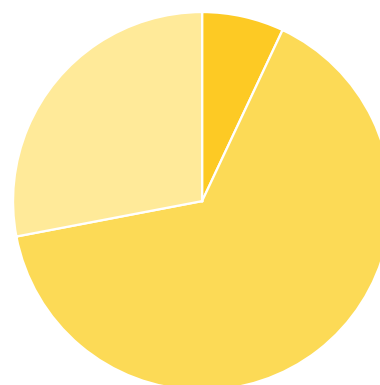
## Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	7 g
Monounsaturated fatty acids	65 g
Polyunsaturated fatty acids	28 g

### Composition

C18:1 Oleic acid	50 – 67 %
C18:2 Linoleic acid	16 – 30 %
C22:1 Erucic acid	max. 2 %

Fatty acids ratio



Gustav Heess

## Rapeseed oil virgin food

The production of our cold-pressed rapeseed oil begins with the harvesting of the rapeseed in summer, when the pods are brownish and easy to open. Before further processing, the seeds undergo a cleaning process, followed by the removal of the hulls, whereby the kernel components are exposed and the hulls are obtained as a by-product.

The hulled rapeseed kernels are then flaked to optimize their surface structure. The flakes are then conditioned, during which the degree of moisture is adjusted to increase oil extraction. The crude oil is separated from the solid components, the so-called press cake, by means of purely mechanical extraction. The crude oil obtained is then filtered to remove natural residues and maintain a high level of quality and purity, which is guaranteed by analyses in our DIN ISO 17025-certified laboratory. With its pleasant, slightly sour note and valuable fatty acid profile, it is ideal for a wide range of food applications.



## Usage

Rapeseed oil, which contains both polyunsaturated and monounsaturated fatty acids, is versatile - both for preparing cold dishes and for cooking, baking and deep-frying at high temperatures, which is facilitated by its low water content. In the preparation of cold dishes, such as salads, it is valued for its rich content of linoleic acid and linolenic acid.

Food



# Organic rapeseed oil

refined

**Article number:**

214122

**INCI name:**

Brassica Campestris Seed Oil

**CAS number:**

8002-13-9

**Botanical name:**

Brassica napus L. und Brassica campestris L.

**Usage:**

Food

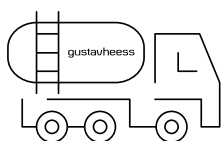
**Certificates:**

EU organic, Kosher

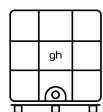
**Origin:**

Mainly from Scandinavia and the Baltic States.

## 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 rapeseed oil

refined

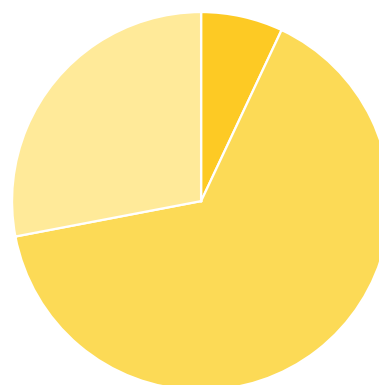
## Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	7 g
Monounsaturated fatty acids	65 g
Polyunsaturated fatty acids	28 g

### Composition

C18:1 Oleic acid	50 – 67 %
C18:2 Linoleic acid	16 – 30 %
C22:1 Erucic acid	max. 2 %

Fatty acids ratio



# Organic rapeseed oil

refined



## Production & description

Rapeseed oil is the fatty oil obtained by cold pressing the crushed, low-erucic acid seeds of *Brassica napus* L. and *Brassica rapa* L. (Cruciferae). The oil is then physically refined.

Clear and light yellow to yellow liquid with characteristic odor and taste.



# Organic rapeseed oil

refined

Gustav Heess

## Organic rapeseed oil refined

Our refined organic rapeseed oil is sourced exclusively from long-standing partner farmers whose cultivation methods we know exactly and can track thanks to a fixed contractual partnership. Our agricultural experts are actively involved in the cultivation process, personally monitoring it in the fields and thus ensuring end-to-end traceability from sowing to oil production. This close cooperation allows us to directly influence the cultivation methods and thus guarantees the highest quality of our oil production.

In the production of our refined organic rapeseed oil, we attach great importance to strict quality controls, end-to-end traceability and sustainable practices. A versatile crop rotation that reduces the use of synthetic products to a minimum, improves the fertility of the soil and enables short transportation routes should be emphasized. The complete utilization of the rapeseed plant reduces waste and contributes to a healthy ecosystem. In addition, the cultivation supports the health and growth of local bee populations, which promotes the production of honey and further emphasizes the sustainability of our refined organic rapeseed oil.





# Organic rapeseed oil

refined

## Usage

Due to its good heatability, the robust refined rapeseed oil is ideal for steaming and frying, for example in a pan. Deep-frying is also possible, but dedicated frying oils are more resilient in this case. It can also be used for people for whom cold pressed rapeseed oil tastes too intense, even for cold cooking.

Food



# Organic rapeseed oil

refined



## Sustainability & responsibility

The rapeseed for our organic rapeseed oil is cultivated extensively in a wide and varied crop rotation. This means that it generally takes between 5 and 7 years to grow rapeseed on the same field. Farmers ensure that soil fertility is maintained by cultivating legumes and keeping animals for several years. In addition, the extensive crop rotation reduces weed pressure and infestation with harmful insects such as the rape seed beetles. This cultivation is therefore a contrast to the usual practice in organic rapeseed cultivation. The industry often tries to compensate by purchasing organic fertilisers and pesticides. However, this is not very sustainable and does not correspond to the original idea of sustainable organic production with a closed nutrient cycle.

A further important advantage of the rape plant is that it can be fully utilised, so that no waste is left behind. This means that rapeseed straw can be left in the field after harvesting - it is an ideal humus-former. The roots of the rapeseed plant serve as nitrogen stores and loosen the soil. As a result, the use of fertiliser in the subsequent field crop can be significantly reduced. The press cake obtained during oil pressing is used as a high-quality protein feed.

During the flowering period, beekeepers set up their colonies near the fields. From one hectare of land the bees collect nectar for up to 100 kg of honey. The rape honey obtained has a mild taste, white to light beige colour and a creamy texture.



# Organic rapeseed oil

cold pressed

**Article number:**

214120

**INCI name:**

Brassica Campestris Seed Oil

**CAS number:**

8002-13-9

**Botanical name:**

Brassica napus L. und Brassica campestris L.

**Usage:**

Food

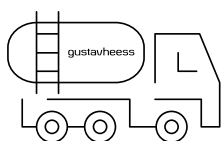
**Certificates:**

EU organic, Kosher

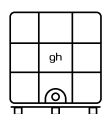
**Origin:**

Mainly Scandinavia and the Baltic States.

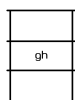
## Our packaging



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 rapeseed oil

cold pressed

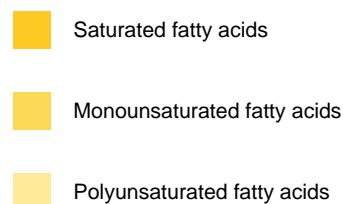
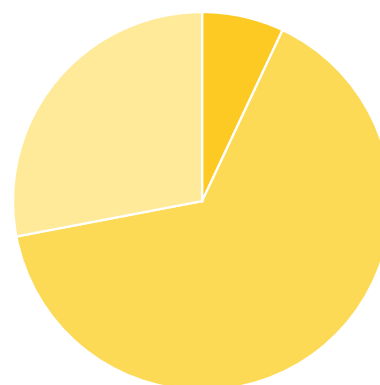
## Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	7 g
Monounsaturated fatty acids	65 g
Polyunsaturated fatty acids	28 g

### Composition

C18:1 Oleic acid	50 – 67 %
C18:2 Linoleic acid	16 – 30 %
C22:1 Erucic acid	max. 2 %

Fatty acids ratio



# Organic rapeseed oil

cold pressed



## Production & description

Rapeseed oil is obtained from the crushed seeds of the low-erucic acid varieties *Brassica napus* L. and *Brassica campestris* L. (Cruciferae) by cold pressing. The oil is not subjected to any refining processes.

Yellow to brownish yellow oil with typical smell and taste.



# Organic rapeseed oil

cold pressed

Gustav Heess

## Organic rapeseed oil cold pressed

Our cold-pressed organic rapeseed oil comes exclusively from known and traceable farmers with whom we have been working closely for a long time through contract farming. This cooperation enables our own agricultural engineers to accompany the cultivation process directly on site in the fields and thus ensure complete traceability from sowing to oil production. Through our direct influence on the cultivation methods as part of contract farming, we ensure the best quality for our cold-pressed organic rapeseed oil.

The production of our organic rapeseed oil is characterized not only by strict controls at all levels of the value chain and complete traceability, but also by its sustainability. A broadly diversified crop rotation, which reduces the use of artificial means to a minimum, increases soil fertility and the short supply chains stand out. The holistic use of the rapeseed plant minimizes waste and promotes a healthy soil ecosystem. In addition, cultivation promotes the health and growth of local bee colonies, which in turn has a positive impact on honey production. This gives our cold-pressed organic rapeseed oil a special quality and underlines its contribution to sustainability.



# Organic rapeseed oil

cold pressed

## Usage

Cold pressed rapeseed oil organic is mainly used as a food for salad dressings and raw vegetables, where its nutty and seedy aroma is particularly appealing. It is also suitable for drizzling warm dishes such as potatoes and for gentle steaming or frying.

Food





# Organic rapeseed oil

cold pressed



## Sustainability & responsibility

The rapeseed for our organic rapeseed oil is cultivated extensively in a wide and varied crop rotation. This means that it generally takes between 5 and 7 years to grow rapeseed on the same field. Farmers ensure that soil fertility is maintained by cultivating legumes and keeping animals for several years. In addition, the extensive crop rotation reduces weed pressure and infestation with harmful insects such as the rape seed beetles. This cultivation is therefore a contrast to the usual practice in organic rapeseed cultivation. The industry often tries to compensate by purchasing organic fertilisers and pesticides. However, this is not very sustainable and does not correspond to the original idea of sustainable organic production with a closed nutrient cycle.

A further important advantage of the rape plant is that it can be fully utilised, so that no waste is left behind. This means that rapeseed straw can be left in the field after harvesting - it is an ideal humus-former. The roots of the rapeseed plant serve as nitrogen stores and loosen the soil. As a result, the use of fertiliser in the subsequent field crop can be significantly reduced. The press cake obtained during oil pressing is used as a high-quality protein feed.

During the flowering period, beekeepers set up their colonies near the fields. From one hectare of land the bees collect nectar for up to 100 kg of honey. The rape honey obtained has a mild taste, white to light beige colour and a creamy texture.

