

Wheat germ oil

Healthy thanks to antioxidants and vitamins



Wheat germ oil is the oil with the highest vitamin E content. This makes wheat germ oil richer than other edible oils.

Qualities & Usage

We carry Wheat germ oil in the following qualities for you

Art.-Nr.	Quality	Cosmetics	Food	Pharmaceutics
316031	Wheat germ oil refined extracted Ph. Eur.	Yes		Yes
316030	Wheat germ oil refined extracted Food Ph. Eur.	Yes	Yes	Yes



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Wheat plant & wheat grain

Wheat belongs to the genus *Triticeae* within the family of sweet grasses (*Poaceae*). The annual plant forms two to three dark green stalks with a height of up to one meter. At the end of each stalk there is an ear with spikelets and flowers. Compared to other sweet grasses, the ears are roundish and the leaf tubes are covered with cilia. The grains develop after self-pollination. About 25 to 40 grains are formed per spikelet. The thousand-grain mass is 40-65 grams.

Wheat is mainly known for its processing into bread and buns. The valuable wheat germ oil (*Tritium Vulgare* L.) is produced from the so-called heart of the wheat grain, the wheat germ. This makes up only 2-3% of the weight of the wheat grain. The grain consists of the endosperm, which makes up 90% of the total weight, the fruit and seed husk (bran) and the germ. Without the fertile germ, no new wheat can grow. Wheat germ oil is actually a by-product of flour production to extend the shelf life of flour. The wheat germ and endosperm are separated from each other in a complex process. The oil content of wheat germ is between 7 and 12%. In order to separate the oil from the germ, one uses the oil press. Here the wheat germ oil is either pressed (cold, warm) or extracted.

When growing wheat, a distinction is made between winter wheat and summer wheat. In Germany, 90% of the wheat is grown in winter. It tolerates frost down to -22°C and is sown in autumn. The demanding wheat requires heavy, nutrient-rich soils (clay or black earth) with a high water capacity.



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Cultivation & yield

The largest wheat producers are China, India and Russia. Other typical growing countries are the USA, Canada, France, Turkey and Germany, but also Great Britain and Argentina.

The harvest time is in the middle of summer of the year after sowing.

The global annual production of wheat in 2018 was 735.18 Mio. tons.

Background / history

Wheat is one of the oldest cultivated plants in the world and was already collected and cultivated 8,000 to 10,000 years ago. Today's wheat is the result of the crossing of several types of cereals and wild grasses. The oldest wheat findings date from the period between 7,800 and 5,200 B.C. Wheat is thus the second oldest type of grain after barley.

The origin of wheat is assumed in the north of the Arabian Peninsula, in Iran, Syria, Iraq and Saudi Arabia. In the Neolithic Age, wheat came to the Mediterranean region, was cultivated by the Romans in ancient times and reached Central Europe in the 11th century.

Today, wheat is a staple food in many countries and is one of the second most commonly grown cereals in the world after maize.



Wheat germ oil

refined extracted Ph. Eur.

**Article number:**

316031

INCI name:

Triticum Vulgare Germ Oil / Triticum Aestivum
Germ Oil

CAS number:

68917-73-7 / 8006-95-9 / 84012-44-2

Botanical name:

Triticum vulgare

Usage:

Cosmetics, Pharmaceuticals

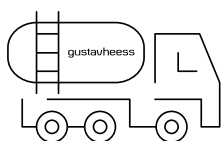
Certificates:

Kosher, NATRUE

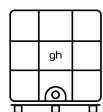
Origin:

Our GMO-free wheat is grown in China and
refined in Europe.

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



Wheat germ oil

refined extracted Ph. Eur.

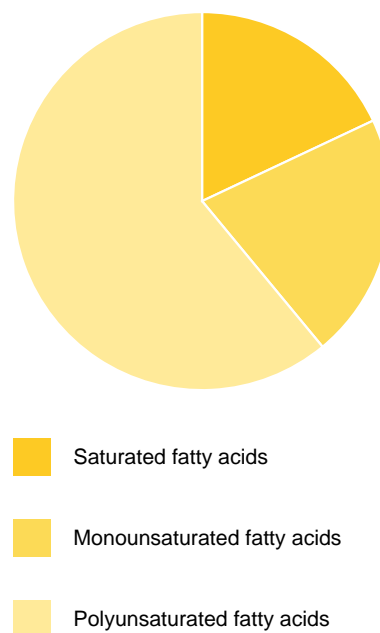
Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	18 g
Monounsaturated fatty acids	21 g
Polyunsaturated fatty acids	61 g

Composition

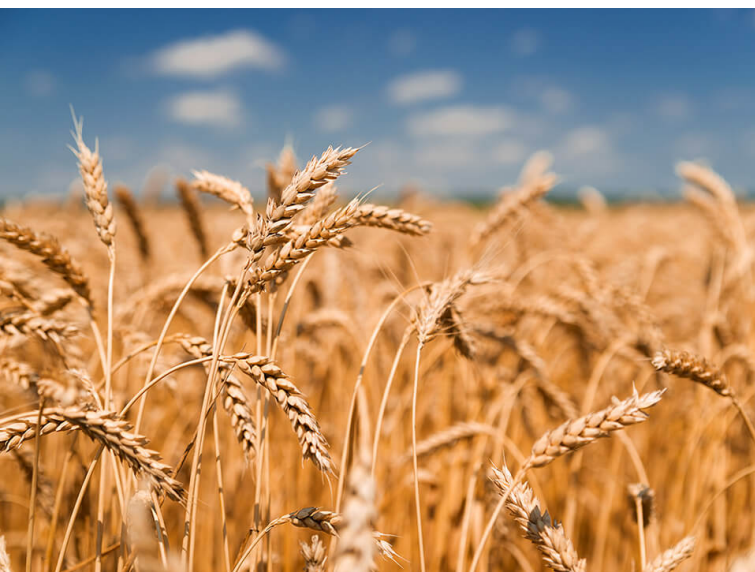
C16:0 Palmitic acid	14 – 19 %
C18:1 Oleic acid	12 – 23 %
C18:2 Linoleic acid	52 – 59 %

Fatty acids ratio



Wheat germ oil

refined extracted Ph. Eur.



Production & description

Wheat germ oil refined extracted Ph. Eur. is obtained from the germ of the grain of *Triticum aestivum* L. by extraction. It is then refined. The oil is prepared using materials and methods to ensure that the content of brassicasterol in the sterol fraction of the oil is not greater than 0,3%.

Clear, light yellow liquid, practically insoluble in water and ethanol 96%, miscible with light petroleum.



Wheat germ oil

refined extracted Ph. Eur.

Gustav Heess

Wheat germ oil refined extracted Ph. Eur.

The production of our wheat germ oil begins with the ripening of the wheat to an optimum moisture content. The wheat is then harvested with combine harvesters and the wheat grains are processed to isolate the germ. The oil extracted from the wheat germ is then refined and filtered several times before undergoing a final quality control. The quality controls are carried out both in our own DIN EN ISO/IEC 17025 accredited laboratory and through additional external analyses.

In order to guarantee consistently high quality and a high level of supply reliability, long-term cooperation is required. Our supply chain has been in place for many years and gives our producers planning security so that they can concentrate fully on quality. Our refined wheat germ oil is always specified according to the latest version of the European Pharmacopoeia (Ph. Eur.).



Wheat germ oil

refined extracted Ph. Eur.

Usage

- Wheat germ oil is skin-firming and very moisturizing improves the elasticity of the skin Is an important component in skin care
 - Is often used in anti-ageing formulations
 - For the production of skin oils, powders, soaps, face masks and as a component in hair care products
 - Has no moisturizing properties
 - As an ingredient in massage oils
 - Used for stretch marks and stretch marks or scar treatments
-
- To support the immune system
 - To stimulate the metabolic processes
 - Is used in wound ointments
 - Because of its natural active ingredient content (vitamin E), wheat germ oil is used as a filling for soft gelatine capsules

Cosmetics

Pharmaceutics



Wheat germ oil

refined extracted Ph. Eur.



Sustainability & responsibility

Wheat is cultivated worldwide. Genetically modified wheat is becoming more and more widespread and in Germany, too. There have already been field trials with genetically modified wheat. We refrain from genetically manipulated varieties and have therefore been working with farmers from China for many years. They rely on GMO-free wheat varieties and provide the basis for our refined extracted wheat germ oil Ph. Eur., which we refine ourselves in Europe.



Wheat germ oil

refined extracted Food Ph. Eur.

**Article number:**

316030

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Botanical name:

Triticum vulgare

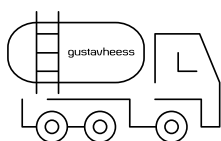
Usage:

Cosmetics, Food, Pharmaceuticals

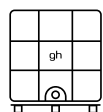
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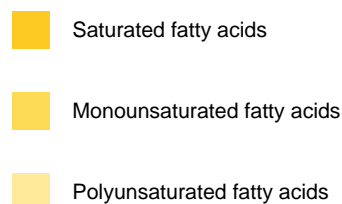
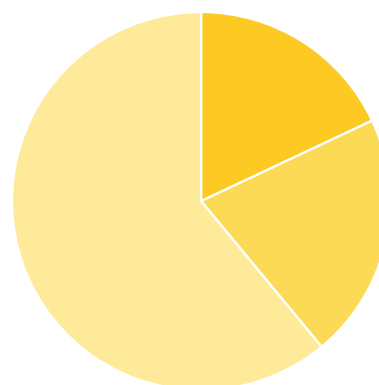
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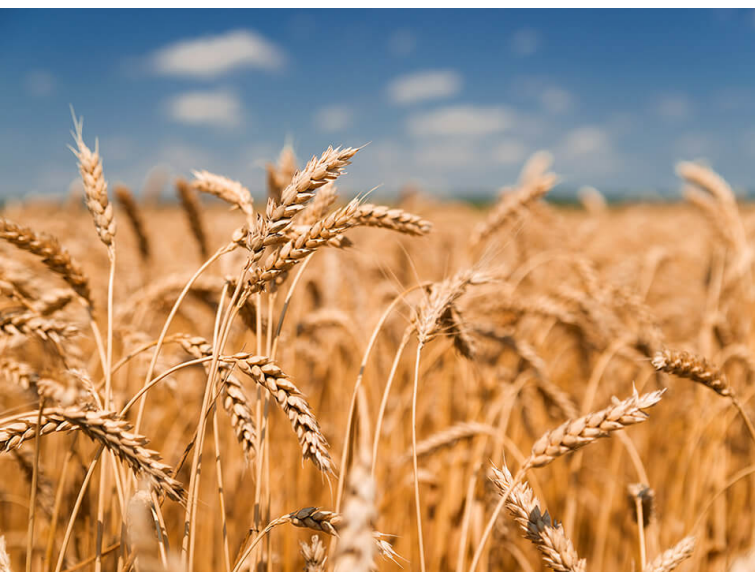
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The production process for our wheat germ oil begins with the ripening of the wheat until it has reached the optimum moisture content. Following the wheat harvest, the grains are processed to separate the valuable germ from them. The resulting oil is then refined and filtered several times before being subjected to comprehensive quality controls. These checks are carried out both in our own laboratory, which is certified to DIN EN ISO/IEC 17025, and by external analysts.

In order to guarantee consistently high quality and reliable deliveries, we rely on long-term partnerships with our suppliers. Our long-established supply chain enables our producers to focus on quality assurance. Our refined wheat germ oil is always produced in accordance with the current guidelines of the European Pharmacopoeia (Ph. Eur.) and is in high demand, particularly in the pharmaceutical and food sectors, due to its high purity and quality.



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- Used for stretch marks and stretch marks or scar treatments

Cosmetics

- Suitable as cooking oil for salads and other cold dishes
- Used as a dietary supplement
- Use as a dietary oil

Food

- To support the immune system
- To stimulate the metabolic processes
- Is used in wound ointments
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Pharmaceutics



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