

# Corn oil (maize oil)

A nutritionally valuable oil



Rich in linoleic acid and omega-6 fatty acids.

## Qualities & Usage

We carry Corn oil (maize oil) in the following qualities for you

Art.-Nr.	Quality	Cosmetics	Food	Pharmaceutics
314020	Corn oil pressed	Yes	Yes	
314031	Corn oil (maize oil) refined solvent extracted Ph. Eur.	Yes	Yes	Yes

The clear, pale yellow to golden yellow oil with a faint smell and taste is used as an edible oil. In the food industry, corn oil is used for the production of foodstuffs (margarine, mayonnaise, dietetics), in cosmetics corn oil is also used for the production of soaps and hair care products. Corn oil is also used as a raw material for lubricants and leather care products in the technical industry.



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## Corn plant & corn kernel

Corn oil is obtained from the seedlings of *Zea mays* L. (Gramineae) by pressing or extraction and is then refined.



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## Cultivation & yield

As an oil-supplying plant, maize is of secondary importance, although maize germ oil is a nutritionally valuable oil due to its palmitic and mainly high oleic and linoleic acid content. However, the linoleic acid content varies considerably depending on the region of cultivation. The oil (oil content of the seedling approx. 35 %) is obtained as a by-product of the processing of corn into maize starch. The crude oil is then refined; cold-pressed corn germ oil is rarely sold.

The largest corn producers are the USA, China and Brazil. Corn is one of the most traded grains after wheat.

## Background / history

The grain species maize has its origin between Mexico and Peru, but the actual wild form cannot be determined, since cultivated maize was selected from wild maize species very early. Remains of already domesticated wild maize forms have been found in caves in southern Mexico and dated to 5,000-3,400 BC. Corn also plays a role in Indian mythology and religion. Inhabitants of the Caribbean islands called it "mahiz", the Spanish adopted this name when they brought corn to Europe around 1,500. Corn was admired as a specialty but was not cultivated in Europe until the 17th century. It reached India and China via Italy, the Balkans and Russia. Since the Second World War, the plant, which is actually tropical and subtropical, has been cultivated worldwide. However, it is preferred as cattle feed, as a source of protein (polenta, tortillas, maize, popcorn) and starch (pudding, starch flour, fine pastries and as a thickener for soups and sauces as well as cornflakes).



# Corn oil

pressed



**Article number:**  
314020

**INCI name:**  
Zea Mays Oil

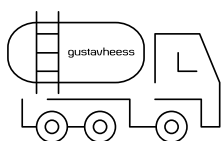
**CAS number:**  
8001-30-7

**Botanical name:**  
Zea mays L.

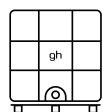
**Usage:**  
Cosmetics, Food

**Certificates:**  
NATRUE, 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





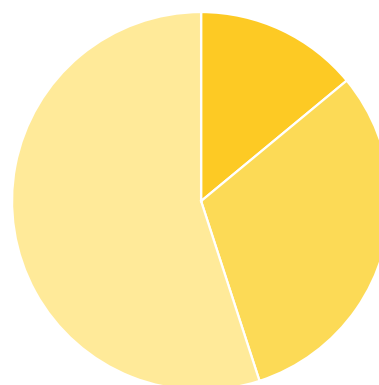
## Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	14 g
Monounsaturated fatty acids	31 g
Polyunsaturated fatty acids	55 g

### Composition

C16:0 Palmitic acid	9 – 15 %
C18:1 Oleic acid	24 – 41 %
C18:2 Linoleic acid	50 – 60 %

Fatty acids ratio



# Corn oil

## pressed

Gustav Heess

## Corn oil pressed

The production process for our pressed maize germ oil begins in the fields with the harvesting of the maize, which is primarily used to extract starch. During starch extraction, corn germ is a valuable by-product. These germs are the key to oil production, as they contain the majority of the oil in the maize grain. After mechanical extraction, the maize germ is first dried to increase the efficiency of oil extraction. The dried germ is then crushed and subjected to a conditioning process to achieve the ideal consistency.

In the next step, the maize germs are fed into an expeller press, where the oil is pressed out of the germs under high pressure. This process produces the crude maize germ oil and at the same time a protein-rich press cake is formed as an additional by-product, which is used in animal feed. The crude oil is filtered in the final phase of the process to remove natural residues. The end product is a high-quality pressed corn oil that can now be used for culinary or cosmetic purposes.



# Corn oil

pressed

## Usage

- Used in creams, hair products and soaps due to its high vitamin E content
- Is often used for salad dressings and marinades
- Margarine, mayonnaise, baby food and diet food are produced using corn oil

Cosmetics

Food



# Corn oil

pressed



## Sustainability & responsibility

We subject our producers to regular audits, whereby we place particular emphasis on compliance with the high quality standards set. At the same time, we check the working conditions of our employees and the ecological impact of the production processes. The use of corn germ as a by-product from starch production plays a key role in our resource-efficient approach and reinforces our commitment to sustainable production.



# Corn oil (maize oil)

refined solvent extracted Ph. Eur.



**Article number:**  
314031

**INCI name:**  
Zea Mays Oil

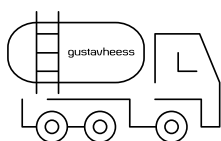
**CAS number:**  
8001-30-7

**Botanical name:**  
Zea mays L.

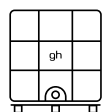
**Usage:**  
Cosmetics, Food, Pharmaceuticals

**Certificates:**  
Kosher

## Our packaging



25,000 kg Tank truck



900 kg IBC



190 kg Drum



27 kg Canister

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# Corn oil (maize oil)

refined solvent extracted Ph. Eur.

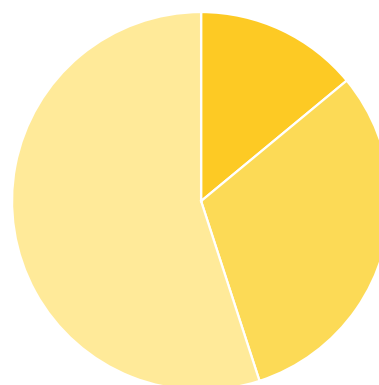
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Fatty acids ratio



# Corn oil (maize oil)

refined solvent extracted Ph. Eur.

Gustav Heess

## Corn oil (maize oil) refined solvent extracted Ph. Eur.

Our production of refined corn oil originates from the agricultural fields where the corn is harvested, which is mainly intended for starch production. During the starch extraction process, maize germ is produced as a valuable by-product. These germs are essential for the production of our oil, as they contain the majority of the oil in the maize. The isolated maize germs undergo a drying process, followed by crushing and conditioning to prepare them for oil extraction. The oil is mechanically extracted in a press under high pressure, producing a protein-rich press cake as an additional by-product, which is used as animal feed. Finally, the maize oil is refined and filtered several times to achieve a particularly high level of quality and purity.

Our refined corn oil not only meets the quality criteria of the European Pharmacopoeia, but also stands out due to the use of corn germ as a by-product of the starch industry. This resource-saving method contributes to sustainable production. By establishing diverse supply chains that include different seed sources as well as geographically distributed locations for oil mills and refineries, we ensure a reliable supply capability, even in the face of local challenges such as extreme weather conditions.



# Corn oil (maize oil)

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## Usage

- Used in creams, hair products and soaps due to its high vitamin E content
- Is often used for salad dressings and marinades
- Margarine, mayonnaise, baby food and diet food are produced using corn oil
- Used for coating tablets and capsules
- Carrier for injections and immunosuppressants
- Popular component in topical preparations

### Cosmetics

### Food

### Pharmaceutics



# Corn oil (maize oil)

refined solvent extracted Ph. Eur.



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