

# Safflower oil high oleic

All-rounder with valuable oleic acid



Depending on the average composition of the triglycerides, a differentiation is made between two types of oil: one with a higher content of esterified oleic acid, also called high oleic, HO or type II, and another, in which esterified linoleic acid, also called high linoleic, lino, type I, predominates.

## Qualities & Usage

We carry Safflower oil high oleic in the following qualities for you

Art.-Nr.	Quality	Cosmetics	Food	Pharmaceutics
226031	Safflower oil high oleic refined type II Ph. Eur.	Yes	Yes	Yes



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## Safflower & safflower seed

Safflower, also known as false saffron is an ancient cultivated plant from Near and Middle Asia with a high utility value. It belongs to the Asteraceae family and is found all over the world.

The annual, herbaceous plant forms tap roots up to three meters deep, reaches a height of up to 130 centimeters and consists of branched stems. It bears 10-15 centimeter long, thorny, serrated leaves. The conspicuous flowers appear at the end of each branch in July/August. The tubular flowers reach a diameter of 3-5 centimeters and are bright yellow to orange. Because of its bright orange-yellow flowers, safflower has also become a popular garden plant. After cross-pollination the flowers develop three to six millimeter long, oily seeds which look like sunflower seeds. These seeds can be removed from the inflorescences from August to September. Depending on the variety, the number of seeds is between 1000-2500.

The undemanding safflower grows best in fertile and permeable soil and prefers temperatures of 24-32°C.

The life span of safflower is between one and two years.



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## Cultivation & yield

Today, safflower is mainly cultivated in India, Mexico, USA, Ethiopia, Australia and Spain. Other growing areas are Germany, Turkey and Hungary.

Safflower is harvested when the plant is fairly dry but not yet withered.

## Background / history

Originally safflower comes from Asia Minor and became known in Egypt as early as 3500 BC as a "dyer's plant". The scientist Georg Schweinfurth identified safflower in 1887 as a burial gift from Egyptian mummies. This shows their importance, as only the pharaoh had the right to plant safflower. At that time, linen clothes and textile fabrics were dyed with their juices. In antiquity the red dye was used for dyeing in the textile dye works. The corresponding dye is the so-called safflower red.

In the Middle Ages safflower also came to Europe. Until modern times, especially in Alsace, safflower was used for dyeing, until it was displaced by the discovery of aniline dyes.





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refined type II Ph. Eur.

**Article number:**

226031

**INCI name:**

Carthamus Tinctorius Seed Oil

**CAS number:**

8001-23-8

**Botanical name:**

Carthamus Tinctorius

**Usage:**

Cosmetics, Food, Pharmaceuticals

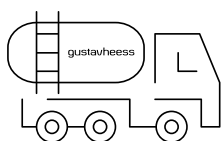
**Certificates:**

Kosher

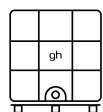
**Origin:**

We purchase the seeds for our safflower oil HO refined type II Ph. Eur. from various growers worldwide. The main countries are the USA and Kazakhstan.

## 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



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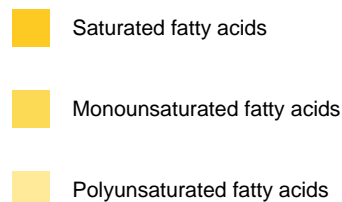
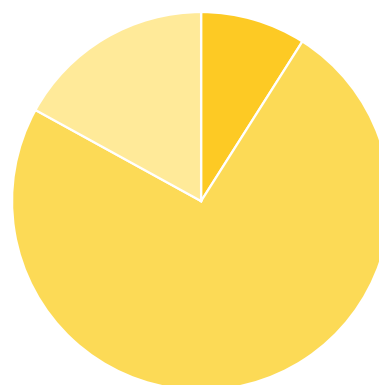
## Nutritional values & composition

Nutritional value	(per 100g)
Energy	3,700 kJ / 900 kcal
Fat	100 g
Saturated fatty acids	9 g
Monounsaturated fatty acids	74 g
Polyunsaturated fatty acids	17 g

### Composition

C16:0 Palmitic acid	3.6 – 6 %
C18:1 Oleic acid	70 – 84 %
C18:2 Linoleic acid	7 – 23 %

Fatty acids ratio



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## Production & description

Safflower oil Type II high oleic is the fatty oil obtained from seeds of hybrids of *Carthamus tinctorius* L. by expression and/or extraction followed by refining. It is rich in oleic (cis-9-octadecenoic) acid. 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%.

A clear, viscous, yellow to pale yellow liquid. It is practically insoluble in ethanol 96%, miscible with light petroleum.



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Gustav Heess

## Safflower oil high oleic refined type II Ph. Eur.

Our refined safflower oil (safflower oil) with a high oleic acid content is free from any additives and is also known as High Oleic, HO or Type II. For many years, we have been promoting the sustainable cultivation of safflower through successful partnerships in Kazakhstan and Canada, thereby offering our partners planning security. The quality of our HO refined safflower oil is always based on the latest edition of the European Pharmacopoeia (Ph. Eur.). To ensure compliance with these high standards, we subject our product to a strict testing procedure. In addition, we have carefully designed our entire supply chain - from quality control to storage - to ensure that it does not mix with other oils.

As soon as the valuable oil arrives in Germany, it is forwarded to our main site in Leonberg. Here, we subject the oleic acid-rich safflower oil raffinate to strict quality tests in our DIN ISO 17025-certified laboratory in order to guarantee a high level of quality and purity. In addition to the high quality, we have also ensured reliable availability through our supply chains. The safflower seeds are sourced from various continents, which enables us to maintain supply availability even in the event of local challenges such as extreme weather conditions.



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## Usage

- Absorbs quickly into the skin without clogging the pores
  - Has a moisturizing and moisture-regulating effect
  - Can have an anti-inflammatory, cleansing and redness-reducing effect
  - Popular ingredient in bath oils and shower gels
  - Reduces age spots and light-induced pigmentation spots
  - Used for acne and blackheads
  - High vitamin K content makes it a popular component in eye care products for dark circles under the eyes
  - Also used as a dietary supplement for dogs to help with coat and skin problems
  - Provides dogs with a shiny coat
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- Used as a dietary cooking oil or salad oil
  - Due to its high smoke point of around 250 °C, refined safflower oil is particularly suitable for frying and deep-frying
  - Suitable for organic wholefood nutrition
  - Use in dietary margarine
  - The low proportion of saturated fatty acid residues makes it a nutritionally valuable oil
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- Use in dermatological preparations
  - Contributes to the maintenance of normal cholesterol levels
  - Has an anti-inflammatory effect
  - Is said to be able to alleviate a variety of skin complaints

### Cosmetics

### Food

### Pharmaceutics





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## Sustainability & responsibility

When selecting our partners, we attach great importance to fair interaction and open communication. We have been working together successfully for many years and support the cultivation of safflower in Kazakhstan. Through this long-term partnership we give our partners planning security and they can therefore concentrate fully on the sustainable cultivation of the safflower plant.

