

# Hemp oil

A forgotten all-rounder



High content of polyunsaturated linolenic acids (alpha and gamma linolenic acid).

## Qualities & Usage

We carry Hemp oil in the following qualities for you

| Art.-Nr. | Quality                                    | Cosmetics | Food | Pharmaceutics |
|----------|--------------------------------------------|-----------|------|---------------|
| 305030   | Hemp seed oil refined                      | Yes       | Yes  |               |
| 305020   | Hemp seed oil cold pressed                 | Yes       | Yes  |               |
| 305120   | Organic hemp seed oil cold pressed         | Yes       | Yes  |               |
| 305160   | Organic hemp seed oil cold pressed EU-Seed | Yes       | Yes  |               |



# Hemp oil

A forgotten all-rounder



## Hemp plant & hemp seeds

Hemp oil is a vegetable oil and is extracted from the hemp seeds (*Cannabis sativa* seed). There is a risk of confusion with the essential hemp oil, which is obtained from distilled leaves and flowers. In contrast to the resin of the hemp plant, the hemp seeds do not contain significant amounts of tetrahydrocannabinol (THC). Therefore, neither the hemp seeds nor the hemp oil have an intoxicating effect.



# Hemp oil

A forgotten all-rounder

## Cultivation & yield

For oil production Cannabis sativa var. sativa with particularly low THC content, i.e. without intoxicating effect, is used. The fat content of the seeds is 30-35%. In oil production the seeds are ground and gently pressed. The green to brown oil contains 45-65% linoleic acid and 14-30%  $\gamma$ -linolenic acid.  $\gamma$ -linolenic acid is also contained in significant proportions.

The worldwide cultivation area of hemp varies strongly from year to year. The largest hemp producers are China, Canada and EU countries.

## Background / history

Hemp is one of the oldest crops in the world. Originally, hemp was probably native to Central Asia, but in the course of time it has spread worldwide and can be found in temperate to tropical zones.



# Hemp seed oil

refined

**Article number:**

305030

**INCI name:**

Cannabis sativa seed oil

**CAS number:**

89958-21-4

**Botanical name:**

Cannabis sativa

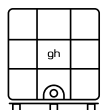
**Usage:**

Cosmetics, Food

**Certificates:**

Kosher

## Our packaging



900 kg IBC



190 kg Drum



27 kg Canister

**General durability:**

canister 12 months, drum 18 months, IBC 6 months



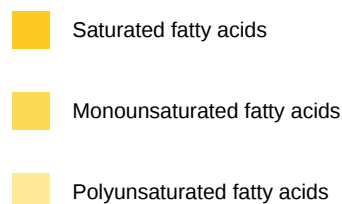
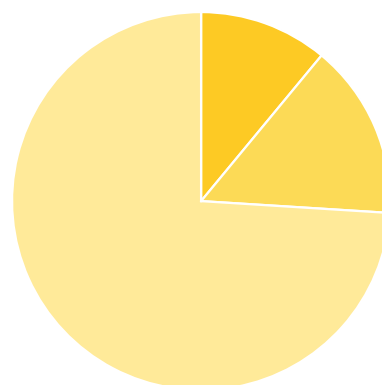
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 11 g                |
| Monounsaturated fatty acids | 15 g                |
| Polyunsaturated fatty acids | 74 g                |

### Composition

|                            |               |
|----------------------------|---------------|
| C16:0 Palmitic acid        | 4.5 – 12.5 %  |
| C18:1 Oleic acid           | 5.5 – 20.5 %  |
| C18:2 Linoleic acid        | 44.5 – 65.5 % |
| C18:3 Alpha-linolenic acid | 13.5 – 30.5 % |

Fatty acids ratio



# Hemp seed oil

cold pressed

**Article number:**

305020

**INCI name:**

Cannabis sativa seed oil

**CAS number:**

89958-21-4

**Botanical name:**

Cannabis sativa

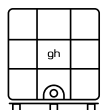
**Usage:**

Cosmetics, Food

**Certificates:**

NATRUE, Kosher

## Our packaging



900 kg IBC



190 kg Drum



27 kg Canister

**General durability:**

canister 12 months, drum 18 months, IBC 6 months



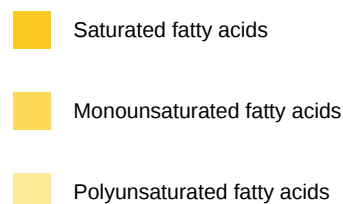
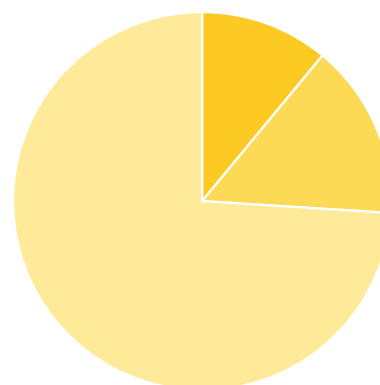
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 11 g                |
| Monounsaturated fatty acids | 15 g                |
| Polyunsaturated fatty acids | 74 g                |

### Composition

|                            |               |
|----------------------------|---------------|
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| C18:3 Alpha-linolenic acid | 13.5 – 30.5 % |

Fatty acids ratio



# Organic hemp seed oil

cold pressed

**Article number:**

305120

**INCI name:**

Cannabis sativa seed oil

**CAS number:**

89958-21-4

**Botanical name:**

Cannabis sativa

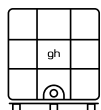
**Usage:**

Cosmetics, Food

**Certificates:**

EU organic, Kosher

## Our packaging



900 kg IBC



190 kg Drum



27 kg Canister

**General durability:**

canister 12 months, drum 18 months, IBC 6 months



# Organic hemp seed oil

cold pressed

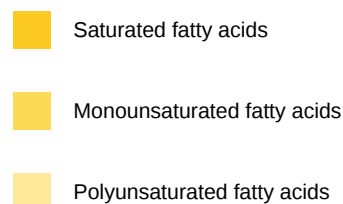
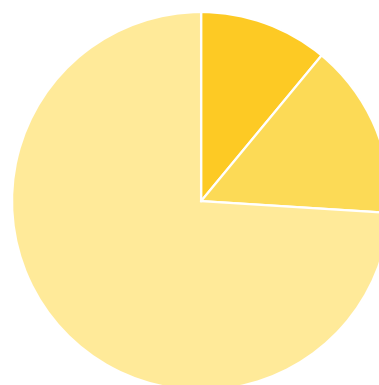
## Nutritional values & composition

| Nutritional value           | (per 100g)          |
|-----------------------------|---------------------|
| Energy                      | 3,700 kJ / 900 kcal |
| Fat                         | 100 g               |
| Saturated fatty acids       | 11 g                |
| Monounsaturated fatty acids | 15 g                |
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### Composition

|                            |               |
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| C16:0 Palmitic acid        | 4.5 – 12.5 %  |
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| C18:2 Linoleic acid        | 44.5 – 65.5 % |
| C18:3 Alpha-linolenic acid | 13.5 – 30.5 % |

Fatty acids ratio



# Organic hemp seed oil

cold pressed EU-Seed

**Article number:**

305160

**INCI name:**

Cannabis sativa seed oil

**CAS number:**

89958-21-4

**Botanical name:**

Cannabis sativa

**Usage:**

Cosmetics, Food

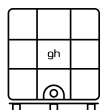
**Certificates:**

EU organic, Kosher

**Origin:**

We offer high quality hemp oil from the regions of Lower Austria and Burgenland (both Austrian provinces), as well as a supply chain with EU seeds.

## Our packaging



900 kg IBC



190 kg Drum



27 kg Canister

**General durability:**

canister 12 months, drum 18 months, IBC 6 months



# Organic hemp seed oil

cold pressed EU-Seed

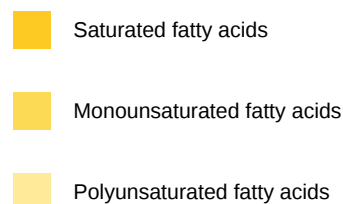
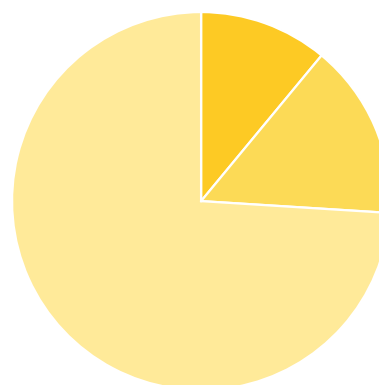
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Fatty acids ratio



# Organic hemp seed oil

cold pressed EU-Seed



## Production & description

Hemp oil is produced from the organic seeds of Cannabis sativa with low THC content by cold pressing.

Dark green oil with typical odor and taste. Insoluble in water, miscible with ether and petroleum ether.



# Organic hemp seed oil

cold pressed EU-Seed

Gustav Heess

## Organic hemp seed oil cold pressed EU-Seed

We offer our hemp oil cold pressed EU seed with two different supply chains. By means of the batch numbers, both supply chains can be clearly separated and traced.

We offer EU seed and additionally hemp oil cold pressed organic from our own contract farming in Lower Austria and Burgenland (both Austrian provinces). With our contract farmers in Austria, we have multi-year purchase agreements with purchase guarantees, thus giving the farmers the business security so that they can concentrate completely on growing hemp. With our Austrian supply chain, we know our growers by name! We currently work with about 10 farmer families or cooperatives. Several times a year we are on site and inspect the fields and exchange information with the farmer families. The hemp grown in Austria is processed locally and pressed in Germany. Due to the geographical proximity, transport distances are saved.



# Organic hemp seed oil

cold pressed EU-Seed

## Usage

### Cosmetics

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Optimal fatty acid ratio of omega 3 to omega 6.  
The fatty acid composition in hemp oil is equivalent to our body's need 3:1 (omega 6:omega 3).

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High content of vitamin E. Hemp oil naturally has a high content of vitamin E.  
Vitamin E protects our cells from free radicals and can prevent cancer.

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Highest content of essential fatty acids.  
Polyunsaturated fatty acids are essential and extremely important for the human metabolism. A deficiency of these fatty acids can even lead to metabolic diseases. Furthermore, they support our immune system.



# Organic hemp seed oil

cold pressed EU-Seed



## Sustainability & responsibility

Our Austrian supply chain focuses on sustainability and responsibility. Hemp is grown in a 3-year crop rotation together with sunflowers and field beans. Crop rotation sustainably increases soil fertility and can also reduce infestations of plant diseases. Through multi-year supply contracts, we give our farming families planning security throughout the entire crop rotation. For quality control, on the one hand the Austrian organic inspection bodies are considered one of the strictest, on the other hand our farmers can be visited and audited at any time. In the Austrian supply chain, we only process hemp that we grow ourselves and do not buy it on the market. Thus, the quality of our hemp oil cold pressed EU can be guaranteed. Of course, we do not use any genetically modified hemp seeds.

Fair dealing and high social standards are important to us. Our farmers receive a premium for the particularly sustainable cultivation, employees and partners are paid fairly.

