Oils consist of fatty acid molecules of different lengths, which can be used by the body in different ways. For MCT oil exactly the range is extracted which can be optimally metabolized.

# **Qualities & Usage**

We carry MCT oil in the following qualities for you

ArtNr.	Quality	Cosmetics	Food	Pharmaceutics
190031	MCT oil type V Ph. Eur.	Yes	Yes	Yes
190050	MCT oil coconut based	Yes	Yes	Yes
190150	Organic MCT Oil coconut based	Yes	Yes	Yes





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## The MCT oil

MCT oil (medium chain triglycerides or medium chain fatty acids), also called neutral oil, is not a vegetable oil in the conventional sense. Oils consist of fatty acid molecules of different lengths. These can be used by the body to varying degrees. Basis of MCT oil is palm oil or coconut oil, from which the fatty acids are isolated and esterified with glycerine. MCT (medium chain triglycerides) are fats with medium chain fatty acids (6-10 carbon atoms), which cannot be stored in the body in the form of fat reserves. Medium chain triglycerides (medium chain triglycerides) caprylic acid (C8) and capric acid (C10), in contrast to long chain fatty acids (LCT = long chain triglycerides, > 10 carbon atoms), are quickly and completely absorbed by the human body without gallic acid and pancreatic enzymes and transported directly to the liver via the portal vein.





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# Origin

The MCT oils are produced from coconut or palm oil by the process of hydrolysis and esterification with glycerin. Despite the chemical processing of coconut or palm oil, the product is declared as natural vegetable oil.

There are four types of medium chain fatty acids:

- 1. the lauric acid (C 12:0)
- 2. the capric acid (C 10:0)
- 3. the caprylic acid (C 8:0)
- 4. the caproic acid (C 6:0)

In the brackets you will find information about how many carbon atoms and double bonds the individual compounds contain. For lauric acid, for example, this means that the compound has 12 carbon atoms but no double bond.

The MCT oil contains all four medium-chain fatty acids mentioned. The most effective components of the oil are thereby the caprylic acid and the capric acid. If both are in sum to at least 90 % component of the MCT oil, it can unfold its effects best.

## **Background / history**

MCT fats have been manufactured industrially since 1955 and are used in a wide variety of applications due to their special properties. MCT oil has been used in medicine, especially in food supplements, for many years. Instead of sugar, MCT oil is also used to increase the performance of the brain. The advantage is that the mediumchain fatty acids cannot be stored in the form of fat reserves.







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25,000 kg Tank truck



190 kg Drum

هه هh 27 kg Canister

#### **General durability:**

canister 12 months, drum 18 months, IBC 6 months





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Article number: 190031

INCI name: Caprylic / Capric Triglyceride

CAS number: 73398-61-5 / 65381-09-1

**Usage:** Cosmetics, Food, Pharmaceutics

Certificates: Kosher

**Origin:** Our MCT oil Typ V Ph. Eur. is made in Europe.

# Nutritional values & composition

Nutritional value	(per 100g)			
Energy	3,700 kJ / 900 kcal			
Fat	100 g			
Saturated fatty acids	100 g			
Composition				
C6:0 Caproic acid	max. 2 %			
C8:0 Caprylic acid	50 - 80 %			
C10:0 Capric acid	20 – 50 %			







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# **Production & description**

MCT oil is of vegetable origin, it is a mixture of triglycerides of saturated fatty acids, mainly of caprylic (octanoic) acid and capric (decanoic) acid. The fatty acids are obtained from the oil extracted from the hard, dried fraction of the endosperm of Cocos nucifera L. or from the dried endosperm of Elaeis guineensis Jacq.

A colourless or slightly yellowish, oily liquid. Practically insoluble in water, miscible with ethanol (96%), with methylene chloride, with light petroleum and with fatty oils.





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## Gustav Heess MCT oil type V Ph. Eur.

Our MCT oil type V Ph. Eur. is always specified according to the latest version of the European Pharmacopoeia (Ph. Eur.). Therefore, we monitor our MCT Oil Type V Ph. Eur. according to a special test plan and have designed our complete supply chain including quality control and storage in such a way that mixing with other oils is excluded. Therefore, we can offer both MCT Oil Type V Ph. Eur. (based on palm oil) as well as MCT oil coconut based.





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# Usage

- · Used in ointments, creams, bath oils and lipstick
- Carrier for oil-soluble active substances and essential oils
- MCT OIL is quickly absorbed into the epidermis, provides and regulates moisture
- · Perfectly suited for formulations for sensitive skin conditions
- Basis for sunscreen products
- · Used as a food supplement and sports nutrition
- Drive for metabolism & brain performance
- Suitable as dietary nutrition
- Refinement of salads & dressings
- Secret ingredient in Bulletproof Coffee (butter coffee made from high quality coffee beans with ghee and MCT oil)
- · For creamy smoothies & shakes as a substitute for milk products
- Supports weight loss
- Used for animal feed in the compound feed and concentrated feed sector
- To strengthen the cardiovascular system
- The caprylic acid contained in MCT oil has an antimycotic, antibacterial and antiviral effect

Cosmetics

Food

**Pharmaceutics** 





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# Sustainability & responsibility

MCT fats do not occur in nature. The valuable, medium-chain fatty acids are mainly contained in coconut and palm kernel oil. Our MCT oil type V is based on palm kernel oil. Compared to other oil plants, such as rapeseed and sunflowers, the oil palm delivers higher yields and therefore requires smaller areas of cultivation.





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Article number: 190050

INCI name: Caprylic / Capric Triglyceride

CAS number: 73398-61-5 / 65381-09-1

**Usage:** Cosmetics, Food, Pharmaceutics

Certificates: Kosher, NATRUE

**Origin:** Our MCT oil coconut based is made in Europe.









#### **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	100 g			
Composition				
C6:0 Caproic acid	max. 2 %			
C8:0 Caprylic acid	50 - 80 %			
C10:0 Capric acid	20 – 50 %			







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# **Production & description**

MCT oil is a mixture of vegetable triglycerides of saturated fatty acids, mainly caprylic and capric acids, of vegetable origin. The substance contains min. 95% of saturated fatty acids with 8 or 10 C-atoms. MCT oil coconut based is obtained from the oil produced from the hard, dried fraction of the endosperm of Cocos nucifera L.

A colourless to pale yellow oily liquid. It is insoluble in water, miscible with dichloromethane, ethanol and petroleum spirit.





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### Gustav Heess MCT oil coconut based

Our coconut based MCT oil has a high quality standard. In order to ensure this high quality standard, we carry out regular audits and analyses. We monitor the quality according to a specially developed test plan using our analyses in our own laboratory accredited according to DIN EN ISO/IEC 17025 and additionally supplement this with external analyses if necessary.





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## Usage

- · Used in ointments, creams, bath oils and lipstick
- Carrier for oil-soluble active substances and essential oils
- MCT OIL is quickly absorbed into the epidermis, provides and regulates moisture
- · Perfectly suited for formulations for sensitive skin conditions
- Basis for sunscreen products
- · Used as a food supplement and sports nutrition
- Drive for metabolism & brain performance
- Suitable as dietary nutrition
- Refinement of salads & dressings
- Secret ingredient in Bulletproof Coffee (butter coffee made from high quality coffee beans with ghee and MCT oil)
- For creamy smoothies & shakes as a substitute for milk products
- Supports weight loss
- Used for animal feed in the compound feed and concentrated feed sector
- To strengthen the cardiovascular system
- The caprylic acid contained in MCT oil has an antimycotic, antibacterial and antiviral effect

Cosmetics

Food

**Pharmaceutics** 





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# Sustainability & responsibility

MCT fats do not occur in nature. The valuable, medium-chain fatty acids are mainly contained in coconut and palm kernel oil. Our coconut based MCT oil does without palm kernel oil and is produced based on coconut.





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**Article number:** 190150

**INCI name:** Caprylic / Capric Triglyceride

CAS number: 73398-61-5 / 65381-09-1

Usage: Cosmetics, Food, Pharmaceutics

**Certificates:** analog EU organic, Kosher









#### **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	100 g			
Composition				
C6:0 Caproic acid	max. 2 %			
C8:0 Caprylic acid	50 - 80 %			
C10:0 Capric acid	20 – 50 %			







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# **Production & description**

MCT oil (medium chain triglycerides) is of purely vegetable origin and consists of a mixture of triglycerides of saturated fatty acids, mainly caprylic and capric acid. The substance contains at least 95% saturated fatty acids with 8 or 10 carbon atoms. MCT oil coconut-based is produced from oil obtained from the solid and dried part of the endosperm of *Cocos nucifera* L..

MCT oil is a colorless to slightly yellowish, oily liquid. It is insoluble in water, miscible with dichloromethane, ethanol and petroleum ether.





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**Gustav Heess** 

# **Organic MCT Oil coconut based**

Our coconut-based organic MCT oil is produced by extracting the medium-chain triglycerides from coconut oil using a fractionation process. The coconut oil is heated to separate its fatty components, whereby the MCTs in particular are extracted due to their lower boiling point. In our production chain, we strictly ensure that no monkeys are used in the coconut harvest in order to guarantee ethically responsible sourcing.

Our organic MCT oil is produced to the highest quality standards, which we ensure through regular audits and analysis. These quality controls are carried out in accordance with a precisely defined test plan, both in our own DIN EN ISO/IEC 17025 accredited laboratory and through additional external analyses. We attach great importance to compliance with environmental and social standards throughout the entire production process in order to ensure both the first-class quality of our product and the protection and health of the ecosystem.









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DNV

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# Organic MCT Oil

## Usage

- · Used in ointments, creams, bath oils and lipstick
- Carrier for oil-soluble active substances and essential oils
- MCT OIL is quickly absorbed into the epidermis, provides and regulates moisture
- · Perfectly suited for formulations for sensitive skin conditions
- Basis for sunscreen products
- · Used as a food supplement and sports nutrition
- Drive for metabolism & brain performance
- Suitable as dietary nutrition
- Refinement of salads & dressings
- Secret ingredient in Bulletproof Coffee (butter coffee made from high quality coffee beans with ghee and MCT oil)
- For creamy smoothies & shakes as a substitute for milk products
- Supports weight loss
- Used for animal feed in the compound feed and concentrated feed sector
- To strengthen the cardiovascular system
- The caprylic acid contained in MCT oil has an antimycotic, antibacterial and antiviral effect

Cosmetics

Food

**Pharmaceutics** 





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# **Organic MCT Oil**

coconut based



# Sustainability & responsibility

MCT fats are not found in nature. The valuable, medium-chain fatty acids are mainly contained in coconut and palm kernel oil. Our coconut-based MCT oil does not contain palm kernel oil and is made from coconut.





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