



SPECIFICATION

Egyptian Black Cumin Oil

- cold pressed, filtered -

Article: 15-000015

Description:

Dark yellowish to greenish-brown, fatty oil, typical in taste and odour. The 100% pure seed oil contains some essential oils and volatile compounds which gives the oil a special, characteristic aroma. The oil is obtained by a mechanical (cold) pressing of the Black cumin seeds (*Nigella sativa*) followed by a filtration.

Plant Species: Nigella sativa

Origin of Seeds: Egypt

Density (20°C): 0,916 – 0,924

Refraction Index (20°C): 1,470 – 1,475

Iodine Value: 115 – 130

Saponification Value: 182 - 197

<u>Parameter</u>	<u>Specification</u>
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<u>Gardner Colour:</u>	> 5
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<u>Odour:</u>	characteristic
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<u>Taste:</u>	characteristic
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<u>Peroxide Value:</u>	< 120 meq/kg
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<u>Acid Value:</u>	< 20 mg KOH/g
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Fatty Acid:

Palmitic acid	C16:0	10,0 – 16,0 %
Stearic acid	C18:0	0,5 – 6,0 %
Oleic acid	C18:1 ω 9	17,0 – 26,0 %
Linoleic acid	C18:2 ω 6	51,0 – 66,0 %
Eicosadienoic acid	C20:2 ω 9	2,0 – 5,0 %
Others		0,0 – 3,0 %

Heavy Metals

Lead	≤ 0,100 ppm
Cadmium	≤ 0,050 ppm
Mercury	≤ 0,050 ppm
Arsenic	≤ 0,100 ppm



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<u>Article:</u>	15-000015
<u>Analysed Pesticides:</u>	according to legal regulations (D, EU)
<u>Microbiology**:</u>	accord. to EP cat. 3B
Total plate count	≤ 1 x 10 ⁴ CFU/g
Yeast and mould	≤ 1 x 10 ² CFU/g
Enterobacteria	≤ 1 x 10 ² CFU/g
E. coli	negative/g
Salmonella	negative/10 g
Staphylococcus aureus	negative/g
<u>Dioxine (WHO-PCDD/F-TEQ)**:</u>	≤ 0,75 pg/g
<u>Benzo(a)pyren (EC-Reg No. 208/2005)**:</u>	≤ 2,0 µg/kg
<u>Aflatoxines, total (B1, B2, G1, G2) (EC-Reg. No. 466/2001)**:</u>	≤ 4,0 µg/kg

** These items are tested 2 times per year.

Stability:

Due to its special nature the Black cumin oil's peroxide and acid values are rising rapidly immediately after production. This phenomenon is traced back to the fact that residues of essential oils mock oxygen of the fatty oil bound as peroxide, therefore the peroxide value is no measure for rancidity.

Storage:

The Black cumin oil should be stored at a cool (10-20°C) and dry place, protected from light. It is advised to cover the oil with an inert gas such as nitrogen.

Shelf Life:

In the unopened drum the durability of the oil is 36 months. Once opened the drums have to be re-flushed with nitrogen, closed airtight and the oil has to be used up within 6 months.

Remark:

This product is in accordance with Regulations (EC) No. 1829/2003 and No. 1830/2003. A labelling regarding presence of genetically modified organisms (GMO) is therefore not necessary.