orderdesk@naturesgift.com

## **Certificate of Analysis**

### **Cumin Seed CO2**

Cuminum cyminum
Batch #GE-411118

production: November 2017 retest: November 2022

raw material: Cuminum cyminum - Seed, dried, from organic farming

country of origin of rawmaterial: Turkey country of origin of product: Germany

D/E - ratio: 10 - 11 kg raw material yield 1 kg product.

#### **Sensory Check**

feature	reference	result
Appearance:	Yellow-brown oil	meets

#### **Analytical Check**

feature	method	limits	value	unit
Content of essential oil	21.006.01, Distillation,	25 - 35	26,9	% (g/ 100g)
	gravimetric			(0 0)
Relative composition of the essential oil:	GCMS, 100 % Method			
beta Pinene	GCMS, cumin.met	n.s.	15,0	%
beta Myrcene	GCMS, cumin.met	n.s.	0,06	%
Cymene	GCMS, cumin.met	n.s.	11,6	%
gamma Terpinene	GCMS, cumin.met	10 - 25	15,2	%
Cumine aldehyde	GCMS, cumin.met	10 - 25	24,4	%
p-Mentha-1,3-diene-7-al	GCMS, cumin.met	n.s.	1,6	%
p-Mentha-1,4-diene-7-al	GCMS, cumin.met	20 - 30	22,2	%
Refractive index (20°C)	21.080.03,	n.s.	1,4861	
Density (20°C)	Abbe-Refractometer 21.024.03, Pycnometer	n.s.	0,923	g/cm³
Fatty acid composition:				
Palmitic Acid C16:0	21.156.03, GCFID	n.s.	3,7	%
Stearic Acid C18:0	21.156.03, GCFID	n.s.	0,75	%
Oleic Acid C18:1 w9	21.156.03, GCFID	n.s.	64,0	%
Vaccenic Acid C18:1 w7	21.156.03, GCFID	n.s.	0,53	%
Linoleic Acid C18:2 w6	21.156.03, GCFID	n.s.	31,0	%
Linolenic acid C18:3 w3	21.156.03, GCFID	n.s.	n.d.	%
		n.s. = not specified	n.d	= not detec

#### Healing Body, Mind and Spirit With Pure Essential Oils Since 1995

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# Certificate of Analysis

#### **Cumin Seed CO2**

Cuminum cyminum
Batch #GE-411118

#### **Analytical Check**

feature	method	limits	value unit
Arachidic Acid C20:0	21.156.03, GCFID	n.s.	n.d. %
Monitoring of substances*:			
Methyl chavicol (Estragole)	GCMS	n.s.	17 ppm
1,8 Cineol	GCMS	n.s.	250 ppm
		n s = not specified	n d = not detected

<sup>\*</sup>Substances to be monitored according to "Arrêté du Juin 2014" laying down the list of plants, authorized in food supplements

Storage conditions: Store in a cool, dry place!

Digitally signed by Anja Cawelius Reason: Quality Control Date: 2017.11.28 10:12:14 +01'00'

The product meets specifications no. 16.280.02/66.280.02; date of analysis: 2017.11.28 This computerized CoA has digital signature validated by Nature's Gift Aromatherapy.

The data in this report of analysis have been determined carefully and to the best of our knowledge. Depending on transport and storage conditions the indicated data can be subject to certain changes which are outside of our influence. Hence the report has not the meaning of a guaranty in the legal sense and does not dispense the customer from making his own quality control before using the product.