

Certificate of Analysis

Product : Hemp Seed Oil Cold Pressed Virgin
Product code : 0160000
Batch No. : 019004
Species : Cannabis Sativa
Manufacturing date : 11-2024
Best use before : 05-2026

Date : 2-12-2024

Description: A clear bright yellow to greenish oil, typical in taste and smell. The Hemp Seed Oil is obtained by mechanical cold pressing and filtration only.

Analytical results:				
Parameter:	unit:	min:	max:	Results:
Acid value	mg KOH/g		4.0	2.09
Peroxide value	meq/KG		8.0	2.2
Moisture	%		0.1	<0.1
Anisidine value			15.0	0.8
Totox value			30.0	5.2
Saponification value ²	mg KOH/g	188.0	194.0	191.5
Unsaponifiable matter ²	%		2.5	0.8
Refractive index at 20°C ²		1.470	1.482	1.478
Specific gravity 20 / 20°C ²	g/ml	0.923	0.930	0.923
Colour	Gardner		18.0	16.0
Δ9 THC (total impurities)	ppm		7.5	2.5
Saturated fatty acids of chain length less than C16	%		0.3	0.0
C16:0 Palmitic	%	4.0	8.0	7.0
C18:0 Stearic	%	1.0	4.0	2.7
C18:1 Oleic	%	5.0	20.0	11.3
C18:1 Cis-Vaccenic	%		2.0	0.9
C18:2 Linoleic	%	46.0	65.0	56.2
C18:3 Alpha Linolenic	%	14.0	28.0	16.1
C18:3 Gamma Linoleic	%		5.0	2.8
Others	%	1.0	5.0	3.0
Lead ¹	mg/kg		0.1	<0.05
Cadmium ¹	mg/kg		0.05	<0.02
Mercury ¹	mg/kg		0.05	<0.005
Arsenic ¹	mg/kg		0.1	<0.02
Benzo (a) Pyrene ²	µg/kg		2.0	<0.4
Sum of B(a)P, B(a)A, B(b)F, chrysene ²	µg/kg		10.0	<1.0
Sum of dioxins and furans (WHO-PCDD/F-TEQ/g) ¹	pg/g		0.75	<0.147
Sum of dioxins, furans, dioxin-like PCBs (WHO-PCDD/F-PCB-TEQ/g) ¹	pg/g		1.25	<0.236
PCB's (Sum 28, 52, 101, 138, 153, 180) (Total 6 DIN-PCB) ¹	ng/g		40.0	<0.1
Salmonella ²	cfu/25g		ND	ND
Yeast & moulds ²	cfu/ml		100	<10
Total viable count (TVC) ²	cfu/g		1000	<20
E. Coli ²	cfu/ml		ND	ND
Staphylococcus Aureus ²	cfu/ml		ND	ND
Pesticide residues in accordance with European Food Law ¹				
¹ These parameters are tested annually on a random batch				
² These parameters are tested 3 times a year on a random batch				

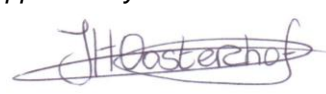
Best use date, storage and packaging:

The oil has a best use date of 18 months in the original packing. If packed in fluorinated HDPE drums best use within 12 months from packing date. Store in a cool and dry place, avoid light and heat. The oil is packed under nitrogen, once opened use content quickly. When taking material fill the drum again with nitrogen and close the drum airtight to avoid oxidation.

Written by: Ms. M. Oudendag



Approved by: Mrs. J.H. Oosterhof





Customer Name:	DWSO
Customer reference:	019004
Seed type:	Hemp Seed Oil
NHE reference:	C24353 - S00021418
Date analysis completed:	26 November 2024

Fatty acid profile (%)		
Cn	FAME	% Composition
C 14:0	myristic	
C 15:0	pentadecanoic	
C 16:0	palmitic	7.0
C 16:1	palmitoleic	0.1
C 16:2	hexadecadienoic	
C 17:0	heptadecanoic	
C 18:0	stearic	2.7
C18:1	oleic	11.3
C18:1	cis-vaccenic	0.9
C18:2	linoleic	56.2
C18:3-gamma	gamma-linoleic	2.8
C18:3 alpha	alpha -Linoleic	16.1
C18:4	stearidonic	0.8
C20:0	eicosanoic	0.9
C20:1	eicosenoic	0.4
C20:2	eicosadienoic	0.1
C20:3	eicosatrienoic	
C22:0	docosanoic	0.3
C22:1	docosenoic	
C24:0	tetracosanoic	0.1
C24:1	tetracosenoic	
C20:5 EPA	eicosapentaenoic	
C22:5 DPA	docosapentaenoic	
C22:6 DHA	docosahexaenoic	
	Minor Components	0.3
	Total	100

Analysis conducted using a capillary column

	Name	Signature	Date
Authorized by	Donglin Zhang		26-NOV-2024 11:38

The sample provided/taken was a representative of the bulk material, this test should be sufficiently accurate of the sample taken. However due to the sample size it does not represent the entirety of the material and as such, not suitable for any legal purposes, although all reasonable care and attention has been given to generating the results.