



Certificate of Analysis

Evening Primrose Seed CO2-to extract (organic)



Art. No. CO2-EVEP-50

batch no. : 702.437, lab no. 30647
 production : December 2020 - Retest: December 2022
 raw material : *Oenothera biennis* - Seeds, dried
 country of origin of raw material : China
 country of origin of product : Germany
 D/E - ratio : 4,5 - 5,3 kg raw material yield 1 kg product
 Product contains : 0,1% Rosemary Antioxidant Extract

Sensory Check

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feature	reference	result
Appearance:	yellow, to green oil	meets
Smell/Taste:	characteristic smell	meets

Analytical Check

feature	method	limits	value	unit
Fatty acid composition				
Palmitic Acid C16:0	21.156.03, GCFID	4-10	5,6	%
Palmitoleic Acid C16:1 w7	21.156.03, GCFID	n.s.	0,02	%
Stearic Acid C18:0	21.156.03, GCFID	< 4	1,7	%
Oleic Acid C18:1 w9	21.156.03, GCFID	4-12	6,1	%
Vaccenic Acid C18:1 w7	21.156.03, GCFID	n.s.	1,1	%
Linoleic Acid C18:2 w6	21.156.03, GCFID	65-78	76,0	%
gamma Linolenic Acid C18:3 w6	21.156.03, GCFID	9-13	9,1	%
alpha Linolenic Acid C18:3 w3	21.156.03, GCFID	n.s.	0,13	%
Arachidic Acid C20:0	21.156.03, GCFID	n.s.	0,29	%
Total fat				
Total fat	DGF method C-VI 10b	n.s.	100	%
Saturated fatty acids				
Saturated fatty acids	DGF method C-VI 10b	n.s.	7,6	%
Monounsaturated fatty acids				
Monounsaturated fatty acids	DGF method C-VI 10b	n.s.	7,2	%
Polyunsaturated fatty acids				
Polyunsaturated fatty acids	DGF method C-VI 10b	n.s.	85,2	%
Fat numbers:				
Unsaponifiables	21.020.03, DGF	0,5-4	2,3	%
Peroxide Value	21.015.03, DGF Wheeler	< 15	6,8	meq O2/kg
Acid Value	21.016.03, DGF	< 12	5,1	mg KOH/g
Saponification Value	21.0017.02, DGF	170-200	194	mg KOH/g
Ester Value	= SV - AV	170-200	189	mg KOH/g
Campesterol				
Campesterol	21.132.03, GCFID	n.s.	0,6	%
Stigmasterol				
Stigmasterol	21.132.03, GCFID	n.s.	0,0019	%
Sitosterol				
Sitosterol	21.132.03, GCFID	n.s.	0,63	%
Sum of Sterols (calc. As Sitosterol)				
Sum of Sterols (calc. As Sitosterol)	21.132.03, GCFID	n.s.	1,0	%

n.s. = not specified n.d. = not detected

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Refract index	21.080.03 Abbe-Refractometer	1,4760-1,4810	1,4784	
Density (20°C)	21.024.03, Pycnometer	0,910-0,940	0,9273	g/cm3
Content of water	21.220.01, Karl Fisher method	n.s.	0,13	%
aw Value	LabSwift aw Value Measurement	< 0,6	0,462 (23,5°C)	
Benzo(a)pyrene	21.177.02, GCMS	< 0,002	meets	ppm
Sum of benzo(a)pyrene, benz(a)anthracene, benzo(b)fluoranthene and Chrysene	21.177.02, GCMS	< 0,010	meets	ppm
Aflatoxine B1	21.193.02, HPLC	EC no 1881/2006	n.d. (< 0,1)	ppb
Total aflatoxines B1, B2, G1, G2	21.193.02, HPLC	EC no 1881/2006	n.d. (< 0,1)	ppb
Pesticides	analyzed by Eurofins US	UPS	meets	

n.s. = not specified n.d. = not detected

The product meets the current version of the analytical (069.001_08_AS) and general (069.001_14_S) specification.

Date of analysis: 2020.12.02

This computerized CoA has digital signature validated by MANUFACTURER QC.

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.