



Certificate of Analysis

Evening Primrose Seed CO₂-to extract (organic), type no. 069.002

Batch #GE-58870

production: December 2018 retest: December 2020
 raw material: *Oenothera biennis* - Seeds, dried, from organic farming
 country of origin of raw material: China
 country of origin of product: Germany
 lab no. 26120
 D/E - ratio: 4,5 - 5,3 kg raw material yield 1 kg product.
 Product contains: 0,1 % Rosemary Antioxidant Extract (organic)

Sensory Check

feature	reference	result
Appearance:	yellow-green oil	meets
Odour:	characteristic smell	meets

Analytical Check

feature	method	limits	value unit
Fatty acid composition:			
Palmitic Acid C16:0	21.156.03, GCFID	4 - 10	6,2 %
Palmitoleic Acid C16:1 w7	21.156.03, GCFID	n.s.	0,05 %
Stearic Acid C18:0	21.156.03, GCFID	< 4	1,5 %
Oleic Acid C18:1 w9	21.156.03, GCFID	4 - 12	5,4 %
Vaccenic Acid C18:1 w7	21.156.03, GCFID	n.s.	0,48 %
Linoleic Acid C18:2 w6	21.156.03, GCFID	65 - 80	76,5 %
gamma Linolenic Acid C18:3 w6	21.156.03, GCFID	9 - 13	9,2 %
Nervonic Acid C24:1 w9	21.156.03, GCFID	n.s.	n.d.
alpha Linolenic acid C18:3 w3	21.156.03, GCFID	n.s.	0,23 %
Arachidic Acid C20:0	21.156.03, GCFID	n.s.	0,31 %
Behenic Acid C22:0	21.156.03, GCFID	n.s.	0,18 %
Erucic Acid C22:1 w9	21.156.03, GCFID	n.s.	n.d. %
Total fat	DGF method, C-VI 10b	n.s.	100,0 %
Saturated fatty acids	DGF method, C-VI 10b	n.s.	8,2 %
Monounsaturated fatty acids	DGF method, C-VI 10b	n.s.	5,9 %
Polyunsaturated fatty acids	DGF method, C-VI 10b	n.s.	85,9 %
Fat numbers:			
Unsaponifiables	21.020.03, DGF	0,5 - 4	2,5 %
Peroxide Value	21.015.03, DGF, Wheeler	< 15	5,3 meq O ₂ /kg

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



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Acid value	21.016.03, DGF	< 12	4,1 mg KOH/g
Saponification value	21.017.02, DGF	170 - 210	191 mg KOH/g
Ester value	= SV - AV	170 - 210	187 mg KOH/g
Campesterol	21.132.03, GCFID	n.s.	0,04 %
Stigmasterol	21.132.03, GCFID	n.s.	0,0055 %
Sitosterol	21.132.03, GCFID	n.s.	0,35 %
Sum of Sterols (calc. as Sitosterol)	21.132.03, GCFID	n.s.	0,90 %
Sum of Tocopherols (calc. as alpha Tocopherol)	21.113.03, HPLC	n.s.	0,049 %
Refractive index (20°C)	21.080.03, Abbe-Refractometer	1,4760 - 1,4810	1,4803
Density (20°C)	21.024.03, Pycnometer	0,910 - 0,940	0,9249 g/cm ³
Content of water	21.220.01, Karl Fischer method	n.s.	0,13 %
aw-value	LabSwift aw-value Measurement	< 0,7	0,51 (23,4 °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
Pesticides	analysed by Covance	UP/EP	meets

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Storage conditions: Store in a cool, dry place and under inert gas!

Digitally signed by Anja Cawelius
 Reason: Quality Control
 Date: 12.13.2018. 11:44:49 +01'00'

The product meets specifications no. 16.185.03/66.211.05; date of analysis: 12.13.2018.

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.