

Nature's Gift®

Balancing Body, Mind and Spirit
with Pure Essential Oils Since 1995

316 Old Hickory Blvd East, Madison, TN 37115
Tel (615)612-4270 fax (615)860-9171
sold@naturesgift.com

www.naturesgift.com

Certificate of Analysis

Sea Buckthorn Pulp CO2 Total (organic)

Batch #DE-59266

production: August 2021 retest: August 2026
raw material: *Hippophae rhamnoides* - Fruit Pulp, dried, from organic farming
country of origin of raw material: Germany
country of origin of product: Germany
D/E - ratio: 8,0 - 14,0 kg raw material yield 1 kg product.
Product contains: 0,08 % Rosemary Antioxidant Extract (organic)

Sensory Check

feature	reference	result
Appearance:	orange-red oil, at room temperature turbidity by some precipitates possible	meets
Odour:	seabuckthorn typical smell	meets

Analytical Check

feature	method	limits	value	unit
Fatty acid composition:				
Palmitic Acid C16:0	21.156.03, GCFID	30 - 40	34,1	%
Palmitoleic Acid C16:1 w7	21.156.03, GCFID	22 - 40	29,0	%
Stearic Acid C18:0	21.156.03, GCFID	< 3	0,99	%
Oleic Acid C18:1 w9	21.156.03, GCFID	10 - 28	22,3	%
Vaccenic Acid C18:1 w7	21.156.03, GCFID	4 - 9	7,1	%
Linoleic Acid C18:2 w6	21.156.03, GCFID	1 - 9	4,1	%
alpha Linolenic acid C18:3 w3	21.156.03, GCFID	< 5	2,2	%
Arachidic Acid C20:0	21.156.03, GCFID	n.s.	0,22	%
Total fat	DGF method, C-VI 10b	n.s.	100,0	%
Saturated fatty acids	DGF method, C-VI 10b	n.s.	35,4	%
Monounsaturated fatty acids	DGF method, C-VI 10b	n.s.	58,3	%
Polyunsaturated fatty acids	DGF method, C-VI 10b	n.s.	6,3	%
Fat numbers:				
Unsaponifiables	21.020.03, DGF	1 - 7	5,9	%
Peroxide Value	21.015.03, DGF, Wheeler	< 11	5,0	meq O2/kg
Acid value	21.016.03, DGF	4 - 18	8,3	mg KOH/g
Saponification value	21.017.02, DGF	170 - 210	191	mg KOH/g
Ester value	= SV - AV	160 - 210	183	mg KOH/g

n.s. = not specified

n.d. = not detected

Certificate of Analysis

Sea Buckthorn Pulp CO2 Total (organic)

Batch #DE-59266

Analytical Check

feature	method	limits	value unit
Iodine value	DGF, calculated	50 - 90	65,7 g I2/100 g
Sum of Carotenoids (calc. as β -Carotene)	21.008.05, Spectrometer	0,10 - 0,20	0,11 %
Sum of Sterols (calc. as Sitosterol)	21.132.03, GCFID	> 1	1,7 %
Sum of Tocopherols (calc. as alpha Tocopherol)	21.113.03, HPLC	n.s.	0,10 %
Content of water	21.220.01, Karl Fischer method	< 1	0,08 %
aw-value	LabSwift aw-value Measurement	< 0,7	0,379 (25,6 °C)
Refractive index (20°C)	21.080.03, Abbe-Refractometer	1,460- 1,480	1,4693
Density (20°C)	21.024.03, Pycnometer	0,900 - 0,925	0,9155 g/cm ³
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

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

The product meets the current version of the analytical (041.007_09_AS) and of the general (041.007_07_S) specification.

date of analysis: 2021.08.13

This computerized CoA has digital signature validated by Nature's Gift.

Digitally signed by Anja Cawelius
Reason: Quality Control
Date: 2021.08.13 15:47:25 +0200'

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.