



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

www.naturesgift.com

Certificate of Analysis: Sea Buckthorn CO₂ Extract, *Hippophae rhamnoides*, Germany.

Batch No: GE-941104

Date of Analysis: 2014.10.15

Producer Batch No: 241403; Lab 1755

D/E - ratio: 8,0 - 14,0 kg raw material yield 1 kg product.

Certification:



Sensory Check

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

Analytical Check

feature	method	limits	value	unit
Fatty acid composition:				
Palmitic Acid C16:0	21.156.02, GCFID	30 - 40	32,8	%
Palmitoleic Acid C16:1 w7	21.156.02, GCFID	22 - 33	29,4	%
Stearic Acid C18:0	21.156.02, GCFID	< 3	0,98	%
Oleic Acid C18:1 w9	21.156.02, GCFID	10 - 28	21,7	%
Vaccenic Acid C18:1 w7	21.156.02, GCFID	4 - 9	6,6	%
Linoleic Acid C18:2 w6	21.156.02, GCFID	1 - 9	6,2	%
alpha Linolenic acid C18:3 w3	21.156.02, GCFID	< 5	2,2	%
Arachidic Acid C20:0	21.156.02, GCFID	n.s.	0,15	%
Fat numbers:				
Unsaponifiables	21.020.02, DGF	1 - 7	6,9	%
Peroxide Value	21.015.02, DGF, Wheeler	< 11	4,4	meq O ₂ /kg
Acid value	21.016.02, DGF	4 - 18	8,7	mg KOH/g
Saponification value	21.017.01, DGF	170 - 210	190	mg KOH/g
Ester value	= SV - AV	160 - 210	181	mg KOH/g
Sum of Carotenoids (calc. as β-Carotene)	21.010.04, UV-VIS	0,14 - 0,27	0,17	%
Sum of Sterols (calc. as Sitosterol)	21.132.02, GCFID	> 1	1,5	%
Sum of Tocopherols (calc. as alpha Tocopherol)	21.113.02, HPLC	> 0,1	0,17	%
Content of water	Karl Fischer method	< 1	0,11	%
Refractive index (20°C)	Abbe-Refractometer	1,460 - 1,480	1,4725	
Density (20°C)	21.024.02, Pycnometer	0,900 - 0,925	0,9162	g/cm ³

n.s. = not specified

n.d. = not detected

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