GREEN VALLEY LABORATORY

CERTIFICATE OF ANALYSIS

Product:	Rosehip Seed CO2 Total Extract, Organic		
INCI:	Rosa Canina (Rose Hip) Seed Extract (and) Rosmarinus Officinalis (Rosemary) Leaf Extract		
Lot #:	5601	**Re-test:**	December 2028

Property	Specification	Analysis
Appearance (Visual)	Clear Oil	Conforms
Color (Visual)	Orange - Light Red	Conforms
Refractive Index, 20°C (Digital Refractometer, 21.271.01)	1.470 - 1.485	1.4796
Relative Density, 20°C, g/cm3 (Pycnometer, 21.024.03)	0.910 - 0.930	0.9283
Moisture, % (Karl Fischer Method, 21.220.01)	Not Specified	0.18
Peroxide Value, meq/kg (AOCS Cd 8-53)	< 12	7.9
Acid Value, mg KOH/g (USP <401>)	1 - 15	2.4
Ester Value, mg KOH/g (Equal to SV - AV)	170 - 200	187
Aw-Value, 22.5°C (LabSwift aw-Value Measurement)	< 0.7	0.460
Saponification Value, mg KOH/g (21.017.02, DGF)	180 - 210	191
Unsaponifiables, % (21.020.03, DGF)	< 3	1.5
Sum of Carotenoids (as β-Carotene), % (21.008.05, Spectrometer)	0.01 - 0.02	0.015
Sum of Sterols (as Sitosterol), % (21.132.03, GCFID)	Not Specified	0.48
Sum of Tocopherols (as α-Tocopherol), % (21.113.03, HPLC)	Not Specified	0.10
Persistent Organic Pollutants		
Benzo(a)pyrene, ppm (21.177.02, GCMS)	< 0.002	0.001
Sum of Benzo(a)pyrene, Benz(a)anthracene, Benzo(b)fluoranthene and Chrysene, ppm (21.177.02, GCMS)	< 0.010	0.008
Fat Analysis		
Total Fat, % (DGF Method, C-VI 10b)	Not Specified	100.0
Saturated Fatty Acids, % (DGF Method, C-VI 10b)	Not Specified	4.9
Monounsaturated Fatty Acids, % (DGF Method, C-VI 10b)	Not Specified	15.2
Polyunsaturated Fatty Acids, % (DGF Method, C-VI 10b)	Not Specified	79.9
Fatty Acid Profile		
C16:0 Palmitic, % (21.156.03, GCFID)	2 - 6	2.8
C16:1 w7 Palmitoleic, % (21.156.03, GCFID)	Not Specified	0.11
C18:0 Stearic, % (21.156.03, GCFID)	< 5	1.4
C18:1 w9 Oleic, % (21.156.03, GCFID)	12 - 22	14.8

C18:1 w7 Vaccenic, % (21.156.03, GCFID)	Not Specified	0.31
C18:2 w6 Linoleic, % (21.156.03, GCFID)	41 - 59	45.6
C18:3 w3 α-Linolenic, % (21.156.03, GCFID)	20 - 35	34.4
C20:0 Arachidic, % (21.156.03, GCFID)	Not Specified	0.69

The above data were obtained using the test-indicated method. Results may vary under other test methods and are subject to the deviation inherent in the test conditions.

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