

CERTIFICATE OF ANALYSIS

Product	Rosehip Oil (<i>Organic</i>)
INCI Name	<i>Rosa Canina Seed</i>
Batch Number	ESC12752 C
Manufacturing Date	July 2023
Retest Date	July 2025
Extraction	Cold pressed
Part of Plant Used	Seeds
Country of Origin	South Africa / Lesotho
Storage Condition	Store in a cool, dry area with no direct sunlight

Methods Used

Method Name	Method Number	Method
Peroxide Value	POL 004	AOCS Method CD 8-53
Free Fatty Acids/Adic Value	POL 005	Based on AOCS Method Cd 3d-63
Saponification Value	POL 007	AOCS Method Cd 3-25
Iodine Value	POL 009	AOCS Method Cd 1c-85
Fatty Acid Profile	POL 015	Based on AOCS Ce 2-66
Relative Density	POL 002	Guy Lussac Pycnometer
Refractive Index *	POL 002	Atago Refractometer
Moisture Content	POL 010	Based on AOCS Method

The results are reported with the expanded relative uncertainty at a confidence level of 95% using a factor of $k = 2$

Sample	Results	Uncertainty	LOQ
Peroxide Value (meg/kg oil)	Lower than LOQ		0.80
Acid Value (mg KOH/g sample)	1.15	± 0.018	0.11
Free Fatty Acids (g oleic acid/100g oil)	0.580	± 0.090	0.056
Saponification Value (mg KOH to saponify 1g sample)	191.0	± 3.3	
Iodine Value *	180.3		
Relative Density * (20°C)	0.9299		
Refractive Index * (20°C)	1.4779		

* NOT SANAS ACCREDITED

Limit of detection (LOD) = 0.09g Fatty Acid/100g Fatty Acids

Limit of quantitation (LOQ) = 0.28g Fatty Acid/100g Fatty Acids

Values below the limit of quantitation cannot be accurately quantified

Fatty Acid	g Fatty Acids/100g Fatty Acids	Uncertainty
C6:0 Caproic Acid	None detected	
C8:0 Caprylic Acid	None detected	
C10:0 Capric Acid	None detected	
C12:0 Lauric Acid	None detected	
C14:0 Myristic Acid	None detected	
C16:0 Palmitic Acid	2.60	± 0.16
C16:1 Palmitoleic Acid	Lower than LOQ	
C17:0 Margaric Acid	None detected	
C17:1 Ginkgolic Acid	None detected	
C18:0 Stearic Acid	1.600	± 0.025
C18:1 trans Oleic Acid	None detected	
C18:1 n9 cis Oleic Acid	14.43	± 0.48
C18:1 n9 Vaccenic Acid *	0.52	
C18:2 trans Linoleic Acid	None detected	

Fatty Acid	g Fatty Acids/100g Fatty Acids	Uncertainty
C18:2 n6 cis Linoleic Acid	44.03	± 0.77
C18:3 n6 Linolenic Acid	Not detected	
C18:3 n3 Linolenic Acid	34.6	± 1.1
C20:0 Arachidic Acid	0.802	± 0.085
C20:1 n9 Eicosenoic Acid	0.50	± 0.15
C20:2 Eicosadienoic	Lower than LOQ	
C21:0 Heneicosanoic Acid	None detected	
C22:0 Behenic Acid	Lower than LOQ	
C24:0 Lignoceric Acid	Lower than LOQ	
C24:1 Nervonic Acid	None detected	
Unknown 1	Lower than LOQ	
Unknown 2	Lower than LOQ	

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