

# SALALAH LABORATORIES

PO Box 67, PC 217, Al Awqadain, Salalah, Sultanate of Oman · Tel: +968 21131300  
ISO/IEC 17025 Accredited Testing Laboratory · Cosmetics & Personal Care Department

Report No. SR-JA-2026-001  
Issue Date 30 April 2026  
Document COA-001 Rev. 0  
Pages 1 of 1

## TEST REPORT — GAS CHROMATOGRAPHY–MASS SPECTROMETRY

ESSENTIAL OIL COMPOSITION ANALYSIS · METHOD ISO 9842:2003

SAMPLE NAME	Jabal Akhdar Rose Otto	BATCH NUMBER	SR-JA0426-001
BOTANICAL NAME	<i>Rosa damascena</i> Mill.	SAMPLE FORM	Pure essential oil, undiluted
ORIGIN	Saiq Plateau, Jabal Akhdar, Sultanate of Oman (1,950 m a.s.l.)	HARVEST	April 2026, dawn pick
EXTRACTION	Hydro-distillation, single-stage cohobation	RECEPTION DATE	26 April 2026
CUSTOMER	Sacrasoul LLP, London, United Kingdom	ANALYSIS DATE	27–29 April 2026
SAMPLE QUANTITY	5.0 g, sealed amber glass vial, refrigerated 4 °C	LAB CONDITIONS	22 °C, 45% RH
SAMPLE CONDITION	Acceptable on receipt; intact seal, no leakage	STORAGE	Amber glass, 4 °C, away from light

### 1. ORGANOLEPTIC & PHYSICO-CHEMICAL PROPERTIES

PARAMETER	RESULT	SPECIFICATION	METHOD	PASS
Appearance	Mobile liquid	Mobile liquid; may crystallise <21 °C	Visual	✓
Colour	Pale yellow	Pale yellow to amber	Visual	✓
Odour	Floral, deep rose	Characteristic of <i>Rosa damascena</i>	Olfactory	✓
Relative density (20 °C)	0.85912	0.848 – 0.864	ISO 279	✓
Refractive index (20 °C)	1.4612	1.4520 – 1.4720	ISO 280	✓
Optical rotation (20 °C)	-2.8°	-5° to 0°	ISO 592	✓
Freezing point	21.4 °C	18 – 23.5 °C	ISO 1041	✓

### 2. CHEMICAL COMPOSITION BY GC-MS (% PEAK AREA, NORMALISED)

COMPOUND	AREA %	COMPOUND	AREA %
α-Pinene	0.34	α-Selinene (isomer)	0.41
β-Pinene	0.18	δ-Guaiene	1.03
β-Myrcene	1.12	α-Farnesene	0.47
D-Limonene	0.27	δ-Cadinene	0.23
γ-Terpinene	0.11	trans-Nerolidol	0.21
Linalool	1.34	β-Elemene	0.16
Phenyl ethyl alcohol	2.18	Hexadecane	0.24
cis-Rose oxide	0.43	γ-Eudesmol	0.22
trans-Rose oxide	0.15	2,6,10-Trimethyltetradecane	0.11
Terpinen-4-ol	0.38	β-Selinene	0.09
α-Terpineol	0.52	Ledene	0.36
Nerol	7.24	8-Heptadecene	0.51
β-Citronellol	25.61	Heptadecane	2.74
Geraniol	19.43	cis-Farnesol	1.62
cis-2,6-Dimethyl-2,6-octadiene	0.24	2,6,10-Dodecatrienal, 3,7,11-trimethyl	0.13
Eugenol	1.67	9-Octadecene, (E)-	0.19
β-Bourbonene	0.22	Octadecane	0.31
Geranyl acetate	1.08	Z-5-Nonadecene	3.84
Methyl eugenol	1.41	Nonadecane	11.62
trans-Caryophyllene	1.32	9-Eicosene, (E)-	0.18
Germacrene D	0.28	Eicosane	0.84
α-Guaiene	0.61	Z-5-Nonadecene (isomer)	0.17
α-Humulene	0.74	Heneicosane	3.91
Germacrene-D (isomer)	0.97	6,11-Dimethyl-2,6,10-dodecatrien-1-ol	0.13
α-Guaiene (isomer)	0.26	Docosane	0.32
trans-Geraniol	0.18	2-Methyl-Z-2-docosane	0.09
α-Selinene	0.19	Tricosane	0.83

INSTRUMENT Agilent 7890B GC / 5977B MSD | COLUMN HP-5MS, 30 m × 0.25 mm × 0.25 μm | CARRIER Helium, 1.0 mL/min | OVEN 60 °C (3 min) → 4 °C/min → 240 °C (10 min) | INJECTION 1.0 μL, split 1:50 | DETECTION EI 70 eV, m/z 40–400 | IDENTIFICATION NIST 2020 + Wiley 11 + retention indices (C8–C40 n-alkane series) | LOQ 0.05% area | REPORTING Components ≥ 0.05% are listed; values normalised to 100%

**CONCLUSION.** The submitted sample of Jabal Akhdar Rose Otto (batch SR-JA0426-001) is a pure essential oil obtained by hydro-distillation of *Rosa damascena* Mill. flowers harvested at dawn from the Saiq Plateau, Sultanate of Oman. All organoleptic and physico-chemical parameters fall within ISO 9842:2003 specification ranges. The chemical profile shows characteristic markers of authentic *Rosa damascena* oil — citronellol, geraniol, nerol, phenyl ethyl alcohol and the n-alkane series — in proportions consistent with the published reference range. No adulterants, synthetic carriers, dilution solvents, or undeclared substances were detected above the limit of quantification. The sample CONFORMS to the reference specification.

ANALYST <b>Ahmed Al Mashani, MSc</b> Senior Analytical Chemist · GC-MS Date: 29 Apr 2026	QUALITY REVIEWER <b>Dr. Fatma Bait Said</b> Quality Assurance Manager Date: 30 Apr 2026	AUTHORISING OFFICER <b>Salim Al Hinai, PhD</b> Laboratory Director Date: 30 Apr 2026
---	--	---



SALALAH LABORATORIES · PO Box 67, PC 217, Al Awqadain, Salalah, Sultanate of Oman · +968 21131300 · salalahlaboratories.com  
Results relate only to the items tested. This report shall not be reproduced, except in full, without written approval of the laboratory.

SACRASOUL · Sacrasoul LLP · sacrasoul.com · hello@sacrasoul.com  
Limited Liability Partnership registered in England & Wales · No. OC443058 · Registered Office: 32 Kinburn Street, London SE16 6DW, United Kingdom