

## Neroli

*Citrus aurantium var amara*

Batch No. MO-59268

Morocco

Monoterpenes	32.58%	Monoterprenols	41.59%	Sesquiterpenes	1.31%
limonene	12.59	linalool	30.60	β caryophyllene	0.61
β pinene	8.65	α terpineol	4.98	(E) β farnesene	0.12
(E ) β ocimene	5.54	geraniol	3.79	germacrene D	0.11
myrcene	1.97	nerol	1.41	bicyclogermacrene	0.11
sabinene	1.13	terpinen-4-ol	0.42	α humulene	0.07
α pinene	0.81	cis-Linalool oxide (5) (furanoid)	0.18	δ elemene	0.06
(Z ) β ocimene	0.71	trans-linalool oxide (5) (furanoid)	0.09	(E,E) α farnesene	0.05
terpinolene	0.48	cis-dehydroxylinalool oxide	0.04	(E,E) farnesol	0.05
γ terpinene	0.23	cis-para-menth-2-en-1-ol	0.02	β elemene	0.03
allo ocimene	0.13	trans-para-menth-2-en-1-ol	0.02	γ elemene	0.03
α terpinene	0.12	borneol	0.02	δ cadinene	0.03
para-cymene	0.11	fenchol	0.01	viridiflorene	0.01
camphene	0.06	trans-piperitol	0.01	α muurolene	0.01
α thujene	0.04			β sesquiphellandrene	0.01
α phellandrene	0.01			Germacrene B	0.01
Esters	11.99%	Ketones	0.18%	Sequiterpenols	9.02%
geranyl acetate	4.64	geranylacetone	0.10	(E) Nerolidol	4.56
linalyl acetate	3.92	6-methyl-5-hepten-2-one	0.03	(Z,E) farnesol	4.38
neryl acetate	2.45	camphenilone	0.03	spathulenol	0.05
methyl anthranilate	0.46	limona ketone	0.01	α cadinol	0.02
α terpinyl acetate	0.20	carvone	0.01	viridiflorol	0.01
(E,E )-farnesyl acetate	0.18				
geranyl formate	0.06				
bornyl acetate	0.04				
hexyl acetate	0.02				
octyl acetate	0.01				
neryl formate	0.01				
Aldehydes	0.13%	Ethers	0.05%	Other	0.66%
(E,Z) farnesal	0.04	α pinene oxide	0.02	indole	0.20
benzaldehyde	0.03	caryophyllene oxide	0.03	phenylacetonitrile	0.17
neral	0.03			2-phenylethanol	0.07
geranial	0.03			tetradecanol	0.07
				heptadecane	0.05
				cis-jasmone	0.04
				noonadecane	0.04
				(E) 2-hexenol	0.01
				1-hexanol	0.01

Client



Source



Neroli (*Citrus aurantium amara*)  
MA-59268

Neroli (*Citrus aurantium amara*)

Batch #:..... MA-59268

Type:..... Essential Oil

CAS Number:... 8016-38-4

Nature's Gift

Sample



Website

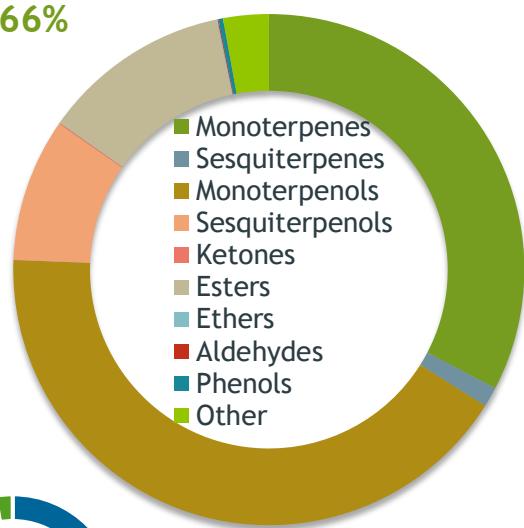


Primary

30.60%Linalool12.59%Limonene8.65%beta-Pinene

### Monoterpenols

41.66%



97.47%

**Percentage Identified**

Result

Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Neroli (*Citrus aurantium amara*)

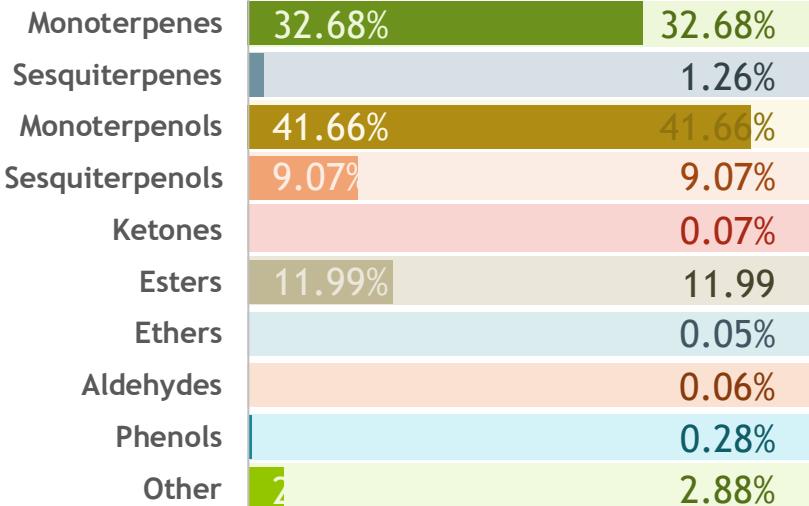
Internal Number: | EVS-5161



**Essential Validation  
Services**

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<https://essentialvalidationservices.com/>


- Essential Oil testing is performed by using qualitative GC-MS. Method: SOP.T.01 Client Method
- This report may not be published without the consent of Essential Validation Services.
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Total Percentage	97.47%			
Number	RT	Area %	Compound Name	Chemical Family
1	5.97	0.01%	(E)-2-Hexenol	Aliphatic Alcohol
2	6.08	0.01%	1-Hexanol	Aliphatic Alcohol
3	7.85	0.04%	alpha-Thujene	Monoterpene
4	8.09	0.81%	alpha-Pinene	Monoterpene
5	8.71	0.06%	Camphene	Monoterpene
6	9.28	0.03%	Benzaldehyde	Simple Phenolic
7	9.69	1.13%	Sabinene	Monoterpene
8	9.88	8.65%	beta-Pinene	Monoterpene
9	10.25	0.03%	6-Methyl-5-hepten-2-one	Aliphatic Ketone
10	10.44	1.97%	Myrcene	Monoterpene
11	11.08	0.04%	cis-Dehydroxylinalool oxide	Monoterpenol
12	11.16	0.01%	alpha-Phellandrene	Monoterpene
13	11.44	0.02%	Hexyl acetate	Aliphatic Ester
14	11.54	0.12%	alpha-Terpinene	Monoterpene
15	11.93	0.11%	para-Cymene	Monoterpene
16	12.19	12.59%	Limonene	Monoterpene
17	12.49	0.71%	(Z)-beta-Ocimene	Monoterpene
18	13.00	5.54%	(E)-beta-Ocimene	Monoterpene
19	13.41	0.23%	gamma-Terpinene	Monoterpene
20	13.99	0.18%	cis-Linalool oxide (5) (furanoid)	Monoterpenol
21	14.18	0.03%	Camphenilone	Monoterpene Ketone
22	14.62	0.48%	Terpinolene	Monoterpene
23	14.72	0.09%	trans-Linalool oxide (5) (furanoid)	Monoterpenol
24	15.17	0.02%	alpha-Pinene oxide	Monoterpene Ether
25	15.80	30.60%	Linalool	Monoterpenol
26	16.07	0.07%	2-Phenylethanol	Simple Phenolic
27	16.34	0.01%	Fenchol	Monoterpenol
28	16.55	0.02%	cis-para-Menth-2-en-1-ol	Monoterpenol
29	16.71	0.13%	Alloocimene	Monoterpene
30	16.95	0.01%	Limona ketone	Simple Phenolic
31	17.12	0.17%	Phenylacetonitrile	Simple Phenolic
32	17.37	0.02%	trans-para-Menth-2-en-1-ol	Monoterpenol
33	18.66	0.02%	Borneol	Monoterpenol
34	19.06	0.42%	Terpinen-4-ol	Monoterpenol
35	19.90	4.98%	alpha-Terpineol	Monoterpenol

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Number	RT	Area %	Compound Name	Chemical Family
36	20.446	0.01%	trans-Piperitol	Monoterpenol
37	20.50	0.01%	Octyl acetate	Aliphatic Ester
38	21.21	1.41%	Nerol	Monoterpenol
39	21.70	0.03%	Neral	Monoterpene Aldehyde
40	21.91	0.01%	Carvone	Monoterpene Ketone
41	22.31	3.92%	Linalyl acetate	Monoterpene Ester
42	22.49	3.79%	Geraniol	Monoterpenol
43	23.06	0.03%	Geranal	Monoterpene Aldehyde
44	23.44	0.01%	Neryl formate	Monoterpene Ester
45	23.68	0.04%	Bornyl acetate	Monoterpene Ester
46	24.30	0.20%	Indole	Indole
47	24.40	0.06%	Geranyl formate	Monoterpene Ester
48	25.91	0.06%	delta-Elemene	Sesquiterpene
49	26.26	0.46%	Methyl anthranilate	Phenolic Ester
50	26.46	0.20%	alpha-Terpinyl acetate	Monoterpene Ester
51	27.10	2.45%	Neryl acetate	Monoterpene Ester
52	27.98	4.64%	Geranyl acetate	Monoterpene Ester
53	28.28	0.03%	beta-Elemene	Sesquiterpene
54	28.43	0.04%	cis-Jasmone	Jasmonate
55	29.44	0.61%	beta-Caryophyllene	Sesquiterpene
56	29.93	0.03%	gamma-Elemene	Sesquiterpene
57	30.77	0.10%	Geranylacetone	Monoterpene
58	30.92	0.07%	alpha-Humulene	Sesquiterpene
59	31.00	0.12%	(E)-beta-Farnesene	Sesquiterpene
60	31.99	0.11%	Germacrene D	Sesquiterpene
61	32.41	0.01%	Viridiflorene	Sesquiterpene
62	32.57	0.11%	Bicyclogermacrene	Sesquiterpene
63	32.77	0.01%	alpha-Muurolene	Sesquiterpene
64	33.10	0.05%	(E,E)-alpha-Farnesene	Sesquiterpene
65	33.56	0.03%	delta-Cadinene	Sesquiterpene
66	33.79	0.01%	beta-Sesquiphellandrene	Sesquiterpene
67	35.03	0.01%	Germacrene B	Sesquiterpene
68	35.45	4.56%	(E)-Nerolidol	Sesquiterpenol
69	35.85	0.05%	Spathulenol	Sesquiterpenol
70	35.94	0.03%	Caryophyllene oxide	Sesquiterpene Ether
71	36.51	0.01%	Viridiflorol	Sesquiterpenol

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## **Neroli (*Citrus aurantium amara*)**

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72	38.85	0.02%	alpha-Cadinol	Sesquiterpenol
73	39.71	0.07%	Tetradecanol	Monoterpenol
74	40.61	0.05%	Heptadecane	Alkane
75	40.83	0.04%	(E,Z)-Farnesal	
76	41.21	4.38%	(Z,E)-Farnesol	Sesquiterpenol
77	41.83	0.05%	(E,E)-Farnesol	Sesquiterpenol
78	45.19	0.18%	(E,E)-Farnesyl acetate	Sesquiterpene Ester
79	47.52	0.04%	Nonadecane	Alkane

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## Essential Validation Services

5/10/2022