



Rose Otto
Rosa damascena

Batch No. TR-59302
Turkey

Monoterpenes 1.98%

α pinene	0.95
myrcene	0.45
β pinene	0.23
sabinene	0.11
limonene	0.06
γ terpinene	0.06
α terpinene	0.03
(E) β ocimene	0.03
para-cymene	0.03
terpinolene	0.02
(Z) β ocimene	0.01

Esters 1.67%

geranyl acetate	1.27
neryl acetate	0.1
methyl geranate	0.06
2-phenylethyl tiglate	0.06
2-phenylethyl benzoate	0.06
benzyl benzoate	0.03
citronellyl formate	0.02
ethyl hexadecanoate	0.02
geranyl formate	0.01
phenylethyl isobutyrate	0.01
ethyl dodecanoate	0.01
phenyl ethyl octanoate	0.01
hexadecyl acetate	0.01

Aldehydes 1.14%

geranial	0.45
neral	0.37
heptanal	0.11
nonanal	0.06
hexadecanal	0.03
undecanal	0.02
benzaldehyde	0.02
tetradecanal	0.01
phenylacetaldehyde	0.01
tridecanal	0.01
octanal	0.01
decanal	0.01
hexanal	0.02
(E,Z) farnesal	0.01

Monoterpenols 62.77%

citronellol	40.57
geraniol	15.03
nerol	5.72
linalool	0.6
terpinen-4-ol	0.47
α terpineol	0.2
cis-isogeraniol	0.1
trans-sabinene hydrate	0.03
(Z) para-menth-2-en-1-ol	0.02
trans-para-menth-2-en-1-ol	0.01
trans-verbenol	0.01
trans-pinocarveol	0.01

Ethers 0.27%

trans-rose oxide	0.14
nerol oxide	0.07
caryophyllene oxide	0.03
1,8 cineole	0.02
parillene	0.01

Other 22.42%

nonadecane	9.8
heneicosane	4.46
nonadecene	2.39
Unknown	1.31
heptadecane	1.24
eicosane	0.98
tricosane	0.98
pentacosane	0.26
pentadecane	0.25
1-hexanol	0.19
octadecane	0.14
docosane	0.12
1-octadecanol	0.1
hexadecane	0.08
tetracosane	0.04
6-methyl-5-hepten-2-ol	0.02
cis-hex-3-en-1-ol	0.02
1-octadecene	0.01
1-octanol	0.01
Germacra-4(15),5,10(14)-trien-1-ol	0.01
tridecane	0.01

Sesquiterpenes 3.49%

germacrene d	1.04
β caryophyllene	0.6
α guaiane	0.52
α bulnesene	0.41
α humulene	0.36
β elemene	0.2
aciphyllene	0.13
(E,E) α farnesene	0.08
β copaene	0.06
δ cadinene	0.02
γ muurolene	0.01
α copaene	0.01
(E) β farnesene	0.01
(Z) muurola-3,5-diene	0.01
dauca-5,8-diene	0.01
γ gurjunene	0.01
β chamigrene	0.01

Sesquiterpenols 1.2%

(Z,E) farnesol	0.69
tetradecanol	0.14
(Z,Z) farnesol	0.08
pogostol	0.07
elemol	0.05
(E) nerolidol	0.04
γ eudesmol	0.03
1-pentadecanol	0.03
(E,E) farnesol	0.02
1-hexadecanol	0.02
(E,Z) farnesol	0.01
α muurolol	0.01
τ muurolol	0.01

Phenols 3.54%

methyleugenol	2.7
2-phenylethanol	0.84

Ketones 0.02%

6-methyl-5-hepten-2-one	0.02
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Client



Source

Rose Otto (*Rosa damascena*)

TR-59302

Sample

Rose Otto (*Rosa damascena*)

Batch #:..... TR-59302

Type:..... Essential Oil

CAS Number:.... 8007-01-0

Nature's Gift

Client



Website

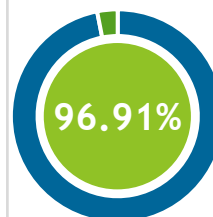
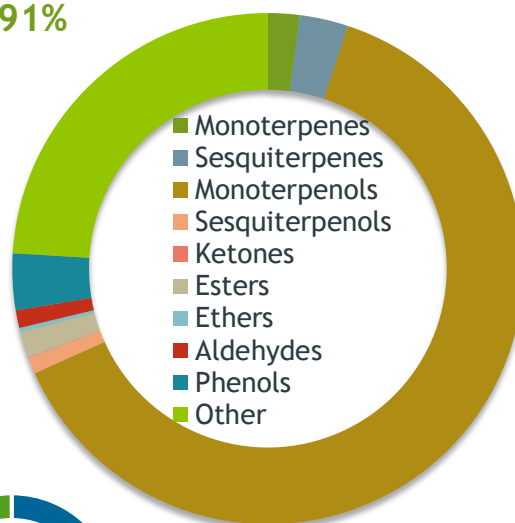


Primary

40.57%Citronellol15.03%Geraniol9.80%Nonadecane

Monoterpenols

62.91%



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 Rose Otto (*Rosa damascena*)

Internal Number: | EVS-5448



Essential Validation
Services

747 SW 2nd Ave IMB 12 Suite 306
Gainesville, FL 32601

317.361.5044 |

<https://essentialvalidationservices.com/>

Monoterpenes	1.98%
Sesquiterpenes	3.08%
Monoterpenols	62.91%
Sesquiterpenols	1.05%
Ketones	0.02%
Esters	1.63%
Ethers	0.27%
Aldehydes	1.11%
Phenols	3.56%
Other	23.93%

Client



Source

Rose Otto (*Rosa damascena*)

TR-59302

Total Percentage		96.91%		
Number	RT	Area %	Compound Name	Chemical Family
1	4.08	0.02%	Hexanal	Aliphatic Aldehyde
2	5.46	0.02%	cis-Hex-3-en-1-ol	Aliphatic Alcohol
3	5.86	0.19%	1-Hexanol	Aliphatic Alcohol
4	6.87	0.11%	Heptanal	Aliphatic Aldehyde
5	7.93	0.95%	alpha-Pinene	Monoterpene
6	9.04	0.02%	Benzaldehyde	Simple Phenolic
7	9.47	0.11%	Sabinene	Monoterpene
8	9.63	0.23%	beta-Pinene	Monoterpene
9	10.03	0.02%	6-Methyl-5-hepten-2-one	Aliphatic Ketone
10	10.21	0.45%	Myrcene	Monoterpene
11	10.40	0.02%	6-Methyl-5-hepten-2-ol	Aliphatic Alcohol
12	10.81	0.01%	Octanal	Aliphatic Aldehyde
13	11.32	0.03%	alpha-Terpinene	Monoterpene
14	11.65	0.03%	para-Cymene	Monoterpene
15	11.85	0.06%	Limonene	Monoterpene
16	11.94	0.02%	1,8-Cineole	Monoterpene Ether
17	12.24	0.01%	(Z)-beta-Ocimene	Monoterpene
18	12.48	0.01%	Phenylacetaldehyde	Aliphatic Aldehyde
19	12.69	0.03%	(E)-beta-Ocimene	Monoterpene
20	13.15	0.06%	gamma-Terpinene	Monoterpene
21	13.68	0.03%	trans-Sabinene hydrate	Monoterpenol
22	13.85	0.01%	1-Octanol	Aliphatic Alcohol
23	14.37	0.02%	Terpinolene	Monoterpene
24	15.01	0.01%	Perillene	Monoterpene Ether
25	15.11	0.60%	Linalool	Monoterpenol
26	15.32	0.06%	Nonanal	Aliphatic Aldehyde
27	15.56	0.84%	2-Phenylethanol	Simple Phenolic
28	16.13	0.02%	cis-para-Menth-2-en-1-ol	Monoterpenol
29	16.24	0.14%	trans-Rose oxide	Monoterpene Ether
30	16.83	0.01%	trans-Pinocarveol	Monoterpenol
31	16.97	0.01%	trans-para-Menth-2-en-1-ol	Monoterpenol
32	17.11	0.01%	trans-Verbenol	Monoterpenol
33	17.45	0.07%	Nerol oxide	Monoterpene Ether
34	18.69	0.47%	Terpinen-4-ol	Monoterpenol
35	19.40	0.20%	alpha-Terpineol	Monoterpenol



Rose Otto (*Rosa damascena*)
TR-59302

Number	RT	Area %	Compound Name	Chemical Family
36	19.988	0.01%	Decanal	Monoterpenol
37	20.88	5.72%	Nerol	Monoterpenol
38	21.28	40.57%	Citronellol	Monoterpenol
39	21.46	0.37%	Neral	Monoterpene Aldehyde
40	21.62	0.10%	cis-Isogeraniol	Monoterpenol
41	22.24	15.03%	Geraniol	Monoterpenol
42	22.78	0.45%	Geranial	Monoterpene Aldehyde
43	23.04	0.02%	Citronellyl formate	Monoterpene Ester
44	24.13	0.01%	Geranyl formate	Monoterpene Ester
45	24.27	0.01%	Tridecane	Alkane
46	24.56	0.02%	Undecanal	Sesquiterpene Aldehyde
47	25.12	0.06%	Methyl geranate	Monoterpene Ester
48	26.38	1.31%	UK Rose Otto	
49	26.76	0.10%	Neryl acetate	Monoterpene Ester
50	27.32	0.01%	alpha-Copaene	Sesquiterpene
51	27.61	1.27%	Geranyl acetate	Monoterpene Ester
52	27.95	0.20%	beta-Elemene	Sesquiterpene
53	28.12	0.01%	Phenylethyl isobutyrate	Phenolic ester
54	28.55	2.70%	Methyl eugenol	Phenylpropanoid
55	29.11	0.60%	beta-Caryophyllene	Sesquiterpene
56	29.56	0.06%	beta-Copaene	Sesquiterpene
57	29.84	0.52%	alpha-Guaiene	Sesquiterpene
58	30.58	0.36%	alpha-Humulene	Sesquiterpene
59	30.69	0.01%	(E)-beta-Farnesene	Sesquiterpene
60	30.87	0.01%	cis-Murola-3,5-diene	Sesquiterpene
61	31.11	0.01%	Dauca-5,8-diene	Sesquiterpene
62	31.29	0.01%	gamma-Gurjunene	Sesquiterpene
63	31.37	0.01%	beta-Chamigrene	Sesquiterpene
64	31.47	0.01%	gamma-Murolene	Sesquiterpene
65	31.65	1.04%	Germacrene D	Sesquiterpene
66	32.30	0.13%	Aciphyllene	Sesquiterpene
67	32.53	0.41%	29.20 Bulnesene<alpha->	0.00
68	32.69	0.25%	Pentadecane	Alkane
69	32.77	0.08%	(E,E)-alpha-Farnesene	Sesquiterpene
70	33.06	0.01%	Tridecanal	Sesquiterpene Aldehyde
71	33.21	0.02%	delta-Cadinene	Sesquiterpene

Rose Otto (*Rosa damascena*)

TR-59302

72	34.37	0.05%	Elemol	Sesquiterpenol
73	34.96	0.04%	(E)-Nerolidol	Sesquiterpenol
74	35.56	0.03%	Caryophyllene oxide	Sesquiterpene Ether
75	35.74	0.06%	2-Phenylethyl tiglate	Phenolic Ester
76	36.31	0.01%	Ethyl dodecanoate	Monoterpene Ester
77	36.59	0.08%	Hexadecane	Alkane
78	37.00	0.01%	Tetradecanal	Sesquiterpene Aldehyde
79	37.51	0.03%	gamma-Eudesmol	Sesquiterpenol
80	37.98	0.01%	T-Muurolol	Sesquiterpenol
81	38.09	0.01%	alpha-Muurolol	Sesquiterpenol
82	38.43	0.07%	Pogostol	Sesquiterpenol
83	39.38	0.14%	Tetradecanol	Monoterpenol
84	39.65	0.01%	5.18 Germacra-4(15),5,10(14)-trien-1-alpha-	0.00
85	39.89	0.08%	(Z,Z)-Farnesol	Sesquiterpenol
86	40.30	1.24%	Heptadecane	Alkane
87	40.46	0.01%	(E,Z)-Farnesal	
88	40.72	0.69%	(Z,E)-Farnesol	Sesquiterpenol
89	41.43	0.02%	(E,E)-Farnesol	Sesquiterpenol
90	42.35	0.03%	Benzyl benzoate	Phenolic Ester
91	42.89	0.03%	1-Pentadecanol	Sesquiterpenol
92	43.81	0.14%	Octadecane	Alkane
93	44.05	0.01%	1-Octadecene	Alkene
94	44.31	0.03%	Hexadecanal	Sesquiterpene Aldehyde
95	45.15	0.01%	42.03 Phenyl ethyl octanoate	0.00
96	45.34	0.06%	2-Phenylethyl benzoate	Phenolic Ester
97	46.26	2.39%	Nonadecene	Alkene
98	46.72	0.02%	1-Hexadecanol	Sesquiterpenol
99	47.25	9.80%	Nonadecane	Alkane
100	50.15	0.02%	47.09 Ethyl hexadecanoate	0.00
101	50.38	0.98%	Eicosane	Alkane
102	50.60	0.01%	47.45 Hexadecyl acetate	0.00
103	53.07	0.10%	1-Octadecanol	Diterpenol
104	53.48	4.46%	Heneicosane	Alkane
105	56.38	0.12%	Docosane	Alkane
106	58.29	0.98%	Tricosane	Alkane
107	59.32	0.04%	Tetracosane	Alkane
108	60.07	0.26%	Pentacosane	Alkane