

Rose Otto *Rosa damascena*

Batch No. TU-59096

Turkey

Monoterpenes	2.44%
α pinene	0.91
terpinen-4-ol	0.47
myrcene	0.42
β pinene	0.22
α terpineol	0.20
sabinene	0.06
γ terpinene	0.05
limonene	0.04
para cymene	0.03
α terpinene	0.02
(Z) β ocimene	0.02

Monoterpenols	62.71%
citronellol	42.57
geraniol	13.21
nerol	6.00
linalool	0.68
cis-isogeraniol	0.12
tetradecanol	0.11
cis-para-menth-2-en-1-ol	0.02

Sesquiterpenes	2.62%
germacrene d	0.84
β caryophyllene	0.53
α guaiene	0.50
α humulene	0.35
β elemene	0.21
α selinene	0.09
(E,E) α farnesene	0.07
β copaene	0.03

Aldehydes	0.97%
geranial	0.54
neral	0.43
heptanal	0.16
nonanal	0.09
hexadecanal	0.04
hexanal	0.02
benzaldehyde	0.02

Ethers	0.25%
trans-rose oxide	0.16
nerol oxide	0.09

Sequiterpenols	0.93%
(E,Z) farnesol	0.75
(Z,E) farnesol	0.09
elemol	0.05
(E) nerolidol	0.04

Esters	2.95%
geranyl acetate	1.37
citronellyl acetate	1.34
neryl acetate	0.1
2-phenylethyl tiglate	0.06
2-phenylethyl benzoate	0.06
benzyl benzoate	0.02

Phenols	3.65%
methyleugenol	2.25
2-phenylethanol	1.4

Other	21.12%
nonadecane	9.18
heneicosane	4.83
nonadecene	2.55
tricosane	1.26
heptadecane	1.2
icosane	1.09
pentadecane	0.27
1-hexanol	0.25
docosane	0.17
octadecane	0.14
1-octadecanol	0.09
hexadecane	0.04
cis-hex-3-en-1-ol	0.03
1-pentanol	0.02

Date of Analysis: 9/16/2020

Client



Source

Rose Otto (*Rosa damascena*)

TU-59096

Total Percentage		97.97%		
Number	RT	Area %	Compound Name	Chemical Family
1	3.85	0.02%	1-Pentanol	Aliphatic Alcohol
2	4.48	0.02%	Hexanal	Aliphatic Aldehyde
3	6.00	0.03%	cis-Hex-3-en-1-ol	Aliphatic Alcohol
4	6.43	0.25%	1-Hexanol	Aliphatic Alcohol
5	7.46	0.16%	Heptanal	Aliphatic Aldehyde
6	8.55	0.91%	alpha-Pinene	Monoterpene
7	9.71	0.02%	Benzaldehyde	Simple Phenolic
8	10.14	0.06%	Sabinene	Monoterpene
9	10.31	0.22%	beta-Pinene	Monoterpene
10	10.90	0.42%	Myrcene	Monoterpene
11	12.03	0.02%	alpha-Terpinene	Monoterpene
12	12.37	0.03%	para-Cymene	Monoterpene
13	12.58	0.04%	Limonene	Monoterpene
14	13.43	0.02%	(Z)-beta-Ocimene	Monoterpene
15	13.91	0.05%	gamma-Terpinene	Monoterpene
16	15.93	0.68%	Linalool	Monoterpenol
17	16.13	0.09%	Nonanal	Aliphatic Aldehyde
18	16.42	1.40%	2-Phenylethanol	Simple Phenolic
19	17.00	0.02%	cis-para-Menth-2-en-1-ol	Monoterpenol
20	17.14	0.16%	trans-Rose oxide	Monoterpene Ether
21	18.32	0.09%	Nerol oxide	Monoterpene Ether
22	19.57	0.47%	Terpinen-4-ol	Monoterpenol
23	20.28	0.20%	alpha-Terpineol	Monoterpenol
24	21.76	6.00%	Nerol	Monoterpenol
25	22.10	42.57%	Citronellol	Monoterpenol
26	22.34	0.43%	Neral	Monoterpene Aldehyde
27	22.48	0.12%	cis-Isogeraniol	Monoterpenol
28	23.06	13.21%	Geraniol	Monoterpenol
29	23.66	0.54%	Geranial	Monoterpene Aldehyde
30	27.25	1.34%	Citronellyl acetate	Monoterpene Ester
31	27.64	0.10%	Neryl acetate	Monoterpene Ester
32	28.49	1.37%	Geranyl acetate	Monoterpene Ester
33	28.83	0.21%	beta-Elemene	Sesquiterpene
34	29.40	2.25%	Methyl eugenol	Phenylpropanoid
35	30.01	0.53%	beta-Caryophyllene	Sesquiterpene

