



Roman Chamomile

Anthemis nobilis

Batch No. IT-59039
 Italy

Monoterpenes	1.63%
α pinene	1.04
camphene	0.34
β pinene	0.12
limonene	0.09
para cymene	0.04

Monoterpenols	8.88%
trans-pinocarveol	7.34
myrtenol	0.93
borneol	0.32
trans-verbenol	0.24
trans-myrtanol	0.04
trans-para-mentha-2,8-dien-1-ol	0.01

Ketones	0
pinocarpone	3.72
pinocamphone	0.40
3-methyl cyclohexanone	0.39
2,4-dimethyl-3-pentanone	0.06
camphenilone	0.06
verbenone	0.02

Esters	77.69%
isobutyl angelate	29.89
isoamyl tiglate	17.1
methallyl angelate	8.42
isoamyl angelate	5.47
isobutyl isobutyrate	3.99
2-methylbutyl isobutyrate	3.42
isobutyl methacrylate	1.82
isoamyl methacrylate	1.33
prenyl angelate	1.03
butyl angelate	0.95
isobutyl-2-methylbutyrate	0.77
isobutyl tiglate	0.61
2-methylbutyl 2-methylbutyrate	0.53
isoamyl isobutyrate	0.45
(Z) 3-hexenyl angelate	0.21
3-methylamyl angelate	0.20
isoamyl isovalerate	0.18
isobutyl isovalerate	0.18
prenyl acetate	0.15
hexyl isobutyrate	0.14
2-methylbutyl acetate	0.13
(Z) 3-hexenyl acetate	0.11
hexyl tiglate	0.11
prenyl isobutyrate	0.10
propyl-2-methylbutyrate	0.07
2-methyl butyl isovalerate	0.06
isoamyl acetate	0.06
heptyl acetate	0.05
isoamyl propionate	0.04
(Z) 3-hexenyl isovalerate	0.03
ethyl angelate	0.03
(E) hex-2-en-1-yl isovalerate	0.02
3-methylamyl isobutyrate	0.02
propyl tiglate	0.02

Sesquiterpenes	0.34%
(E,E) α Farnesene	0.15
germacrene D	0.11
β selinene	0.06
cis-caryophyllene	0.02

Sesquiterpenols	0.08%
viridiflorol	0.07
longipinanol	0.01

Aldehydes	0.08%
(E) 2-hexenal	0.02
hexanal	0.02
α campholene aldehyde	0.02
2-heptenal	0.01
hexadecanal	0.01

Ethers	0.05%
1,8-cineole	0.05

Other	0.77%
(Z) hex-3-en-1-ol	0.37
1-hexanol	0.18
(E) 2-hexenol	0.11
1-nonanol	0.02
2-pentylfuran	0.02
benzaldehyde	0.02
decanal	0.02
(E) hex-3-en-1-ol	0.01
3-methylpentanol	0.01
undecane	0.01

Raw Material: Roman Chamomile
 INCI Name: *Anthemis nobilis*
 Production Method: Steam Dist., flowers
 Date of Analysis: 6/6/2020

Client



Source



Chamomile, Roman (*Anthemis nobilis*)
IT-59039

Sample

Chamomile, Roman (*Anthemis nobilis*)

Batch #:..... IT-59039

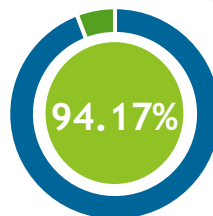
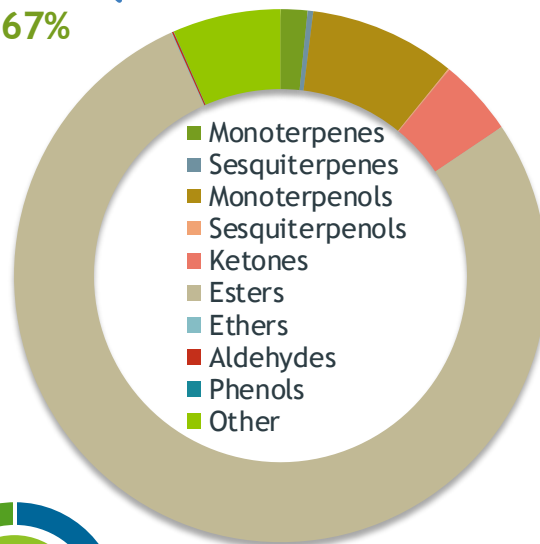
Type:..... Essential Oil

CAS Number:... 8015-92-7

Nature's Gift

Esters

77.67%



Percentage Identified

Client



Website



Primary

29.89%

Isobutyl angelate

17.10%

Isoamyl tiglate

8.42%

Methallyl angelate

Result



Conclusion

No adulterants, diluents, or contaminants were detected via this method. This oil meets the expected profile for genuine Essential Oil of Chamomile, Roman (*Anthemis nobilis*)

Internal Number: | EVS-3712



Essential Validation Services

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

317.361.5044 |
<https://essentialvalidationservices.com/>

adam@essentialvalidationservices.com

Monoterpenes	1.63%
Sesquiterpenes	0.34%
Monoterpenols	8.88%
Sesquiterpenols	0.08%
Ketones	4.65%
Esters	77.67%
Ethers	0.05%
Aldehydes	0.10%
Phenols	0.02%
Other	6.56%

- 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.
 - Chromatograph image may be requested
 - This report is valid for 1 year from the analyzed date

Client



Source

Chamomile, Roman (*Anthemis nobilis*)

IT-59039

Total Percentage		94.17%		
Number	RT	Area %	Compound Name	Chemical Family
1	3.90	0.06%	2,4-Dimethyl-3-pentanone	Aliphatic Ketone
2	4.47	0.02%	Hexanal	Aliphatic Aldehyde
3	5.66	0.01%	3-Methylpentanol	Aliphatic Alcohol
4	5.78	0.01%	(E)-Hex-3-en-1-ol	Aliphatic Alcohol
5	5.86	0.02%	(E)-2-Hexenal	Aliphatic Aldehyde
6	5.91	0.37%	cis-Hex-3-en-1-ol	Aliphatic Alcohol
7	6.23	0.11%	(E)-2-Hexenol	Aliphatic Alcohol
8	6.34	0.18%	1-Hexanol	Aliphatic Alcohol
9	6.58	0.06%	Isoamyl acetate	Aliphatic Ester
10	6.65	0.13%	2-Methylbutyl acetate	Aliphatic Ester
11	7.23	0.03%	Ethyl angelate	Aliphatic Ester
12	7.89	3.99%	Isobutyl isobutyrate	Aliphatic Ester
13	8.12	0.15%	Prenyl acetate	Aliphatic Ester
14	8.57	1.04%	alpha-Pinene	Monoterpene
15	8.81	1.82%	Isobutyl methacrylate	Aliphatic Ester
16	9.08	0.07%	Propyl 2-methylbutyrate	Aliphatic Ester
17	9.19	0.34%	Camphene	Monoterpene
18	9.40	0.39%	3-Methyl cyclohexanone	Aliphatic Ketone
19	9.53	0.01%	2-Heptenal	Aliphatic Aldehyde
20	9.66	0.02%	Benzaldehyde	Simple Phenolic
21	10.15	0.04%	Isoamyl propionate	Aliphatic Ester
22	10.32	0.12%	beta-Pinene	Monoterpene
23	10.91	0.02%	2-Pentylfuran	Furan
24	11.46	0.77%	Isobutyl 2-methylbutyrate	Aliphatic Ester
25	11.58	0.11%	(Z)-3-Hexenyl acetate	Aliphatic Ester
26	11.66	0.18%	Isobutyl isovalerate	Aliphatic Ester
27	11.91	0.45%	Isoamyl isobutyrate	Aliphatic Ester
28	12.05	3.42%	2-Methylbutyl isobutyrate	Aliphatic Ester
29	12.38	0.04%	para-Cymene	Monoterpene
30	12.59	0.09%	Limonene	Monoterpene
31	12.69	0.05%	1,8-Cineole	Monoterpene Ether
32	12.88	0.02%	8.99 Propyl tiglate	0.00
33	13.21	1.33%	Isoamyl methacrylate	Aliphatic Ester
34	13.67	29.89%	Isobutyl angelate	Aliphatic Ester
35	13.87	0.10%	Prenyl isobutyrate	Aliphatic Ester

ESSENTIAL VALIDATION SERVICES | 747 SW 2ND AVE GAINESVILLE, FLORIDA 32601 | 317-361-5044

- 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.
 - Chromatograph image may be requested
 - This report is valid for 1 year from the analyzed date

Client



Source

Chamomile, Roman (*Anthemis nobilis*)

IT-59039

Number	RT	Area %	Compound Name	Chemical Family
36	14.246	8.42%	Methallyl angelate	Aliphatic Ester
37	15.12	0.06%	Camphenilone	Monoterpene Ketone
38	15.35	0.95%	Butyl angelate	Aliphatic Ester
39	15.47	0.61%	Isobutyl tiglate	Aliphatic Ester
40	15.88	0.18%	Isoamyl isovalerate	Aliphatic Ester
41	16.03	0.53%	2-Methylbutyl 2-methylbutyrate	Aliphatic Ester
42	16.29	0.06%	2-Methyl Butyl Isovalerate	Monoterpene Ester
43	16.44	0.01%	Undecane	Alkane
44	16.63	0.02%	3-Methylamyl isobutyrate	Aliphatic Ester
45	16.83	0.01%	trans-para-Mentha-2,8-dien-1-ol	Monoterpenol
46	17.02	0.02%	alpha-Campholene aldehyde	Monoterpene Aldehyde
47	17.43	0.05%	Heptyl acetate	Monoterpene Ester
48	17.66	7.34%	trans-Pinocarveol	Monoterpenol
49	17.85	0.14%	Hexyl isobutyrate	Monoterpene Ester
50	17.90	0.24%	trans-Verbenol	Monoterpenol
51	18.11	5.47%	Isoamyl angelate	Aliphatic Ester
52	18.32	17.10%	Isoamyl tiglate	Aliphatic Ester
53	18.63	3.72%	Pinocarvone	Monoterpene Ketone
54	19.09	0.32%	Borneol	Monoterpenol
55	19.25	0.40%	Pinocamphone	Monoterpene Ketone
56	19.40	0.02%	1-Nonanol	Fatty alcohol
57	20.09	1.03%	Prenyl angelate	Aliphatic Ester
58	20.23	0.93%	Myrtenol	Monoterpenol
59	20.69	0.02%	Verbenone	Monoterpene Ketone
60	20.79	0.02%	Decanal	Aliphatic Aldehyde
61	21.91	0.03%	cis-3-Hexenyl isovalerate	Aliphatic Ester
62	22.15	0.02%	trans-Hex-2-en-1-yl isovalerate	Aliphatic Ester
63	22.83	0.20%	3-Methylamyl angelate	Aliphatic Ester
64	23.25	0.04%	trans-Myrtenol	Monoterpenol
65	23.99	0.21%	(Z)-3-Hexenyl angelate	Aliphatic Ester
66	26.36	0.11%	Hexyl tiglate	Monoterpene Ester
67	30.01	0.02%	cis-Caryophyllene	Sesquiterpene
68	32.55	0.11%	Germacrene D	Sesquiterpene
69	32.86	0.06%	beta-Selinene	Sesquiterpene
70	33.64	0.15%	(E,E)-alpha-Farnesene	Sesquiterpene
71	36.46	0.01%	Longipinanol	Sesquiterpenol

ESSENTIAL VALIDATION SERVICES | 747 SW 2ND AVE GAINESVILLE, FLORIDA 32601 | 317-361-5044

- 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.
 - Chromatograph image may be requested
 - This report is valid for 1 year from the analyzed date

