



Essential Oil University

GC/MS Report

Item	Lot
Roman Chamomile EO <i>Anthemis nobilis</i>	7P
Date	Analyst
1/16/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Roman Chamomile EO, meets the expected chemical profile for authentic essential oil of *Anthemis nobilis*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Roman Chamomile EO**Botanical Name:** Anthemis nobilis**Lot Number:** 7P**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 1/16/2025**Manufacture Date:** November 2024

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 µL**Temperature Program:** 2C/min

Physical Data

ANALYSIS

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

+0.96

1.44399

0.90308



Ret. Time	Component	Ret. Idx.	Conc. %	
3.721	Unidentified	616	0.01%	
4.023	Unidentified	646	0.01%	
4.138	Unidentified	657	0.01%	
5.142	1-Pentanol	726	0.02%	
5.215	2-Methylbutanol	730	0.03%	
5.966	Isobutyl acetate	764	0.02%	
6.047	Unidentified	768	0.01%	
6.440	1-Octene	786	0.01%	
7.416	Methyl tiglate	818	0.02%	
8.184	3-Methylpentanol	838	0.03%	
8.310	Ethyl 2-methylbutyrate	841	0.05%	
8.553	Propyl isobutyrate	848	0.06%	
9.047	Unidentified	860	0.01%	
9.405	Isoamyl acetate	870	0.05%	
9.489	2-Methylbutyl acetate	872	0.06%	
9.600	Propyl methacrylate	875	0.05%	
10.264	Unidentified	892	0.02%	
11.128	Isobutyl isobutyrate	910	4.41%	
11.437	Prenyl acetate	916	0.48%	
11.811	Unidentified	923	0.02%	
11.893	2,5,8-Trimethylnonane	924	0.57%	
12.219	alpha-Pinene	930	6.15%	
12.384	Isobutyl methacrylate	933	1.34%	
12.752	Propyl 2-methylbutyrate	940	0.06%	
13.103	Camphene	946	0.35%	
13.188	3-Methylcyclohexanone	948	1.22%	
13.308	Unidentified	950	0.03%	
14.108	Isopentyl propanoate	965	0.02%	
14.216	2-Methylbutyl propionate	967	0.03%	
14.369	Sabinene	969	0.02%	
14.663	beta-Pinene	975	1.61%	
14.794	Unidentified	977	0.19%	
15.317	Myrcene	987	0.05%	
15.427	Propyl angelate	989	0.72%	
15.749	Unidentified	994	0.02%	
16.058	Isobutyl 2-methylbutyrate	1000	0.86%	
16.326	Isobutyl isovalerate	1004	0.14%	
16.667	Isoamyl isobutyrate	1009	3.77%	
16.870	2-Methylbutyl isobutyrate	1012	2.14%	
16.960	Unidentified isomer I	1014	0.26%	



Ret. Time	Component	Ret. Idx.	Conc. %	
17.230	Unidentified isomer I	1018	0.07%	
17.481	para-Cymene	1022	0.15%	
17.779	Limonene	1026	1.28%	IFRA
17.950	1,8-Cineole	1029	0.04%	
18.083	Unidentified	1031	0.02%	
18.432	Pentyl methacrylate	1036	1%	
18.513	Isopentyl methacrylate	1038	1.52%	
19.071	Isobutyl angelate	1046	9.12%	
19.423	Prenyl isobutyrate	1052	0.93%	
19.644	Unidentified	1055	0.02%	
19.970	Methallyl angelate	1060	9.59%	
20.640	Hexyl propionate	1070	0.12%	
20.876	Unidentified	1074	0.01%	
21.034	Unidentified	1076	0.02%	
21.268	Camphenilone	1080	0.62%	
21.616	Butyl angelate	1085	0.4%	
21.740	Unidentified	1087	0.02%	
21.808	Isobutyl tiglate	1088	0.08%	
22.399	Isoamyl 2-methylbutyrate	1097	0.27%	
22.619	2-Methylbutyl-2-methylbutyrate	1101	4.76%	
22.756	Unidentified	1102	0.04%	
22.840	Unidentified	1104	0.02%	
22.925	Unidentified	1105	0.08%	
22.986	2-Methylbutyl isovalerate	1106	0.12%	
23.078	Isobutyl hexanoate	1107	0.23%	
23.212	Unidentified	1109	0.04%	
23.466	3-Methylamyl isobutyrate	1113	1.48%	
24.072	Unidentified	1122	0.04%	
24.243	alpha-Campholenal	1124	0.1%	
24.397	Unidentified	1126	0.04%	
25.194	trans-Pinocarveol	1138	2.99%	
25.293	Unidentified	1139	0.22%	
25.437	Butanoic acid ester	1141	2.84%	
25.647	Isoamyl angelate	1144	5.6%	
25.924	Isoamyl tiglate	1148	9.34%	
26.171	trans-beta-Terpineol	1152	0.12%	
26.419	Amyl angelate isomer	1156	0.57%	
26.553	Unidentified	1158	0.04%	
26.678	Pinocavone	1159	3.12%	
27.161	Unidentified	1166	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %
27.324	Borneol	1169	0.13%
27.610	Isopinocampnone	1173	0.13%
27.810	Unidentified	1176	0.03%
27.931	Unidentified	1178	0.04%
28.266	Unidentified	1182	0.08%
28.616	2-Methyl-2-butene angelate	1188	1.98%
28.943	Myrtenal	1192	0.92%
29.490	3-Methyl-3-methylpentyl-butyrate	1200	0.71%
29.735	Unidentified	1204	0.01%
29.885	Unidentified	1206	0.01%
29.950	Unidentified	1207	0.04%
30.033	Unidentified	1208	0.09%
30.580	Unidentified	1216	0.01%
31.912	2-Hydroxy-2-methyl-but-3-enyl 2-methyl-2-cis-butenolate	1236	0.43%
32.513	4-Methylamyl angelate	1245	0.02%
32.770	Methylpentyl angelate	1248	11.68%
34.506	(3Z)-Hexenyl angelate	1274	0.04%
34.760	Unidentified	1278	0.02%
34.822	Unidentified	1278	0.03%
34.966	Hexyl angelate	1281	0.1%
35.598	Unidentified	1290	0.01%
35.759	Unidentified	1292	0.01%
35.934	3-Methylpentyl 2-methyltiglate	1295	0.05%
36.899	Unidentified	1309	0.04%
38.102	(2Z)-Hexenyl tiglate	1328	0.04%
39.098	Unidentified	1343	0.01%
39.373	Unidentified	1347	0.02%
40.611	Unidentified	1366	0.02%
41.040	Unidentified	1372	0.02%
41.660	Unidentified	1382	0.03%
43.300	Unidentified	1407	0.03%
43.834	beta-Caryophyllene	1416	0.04%
45.090	Unidentified	1436	0.02%
45.938	trans-beta-Farnesene	1450	0.03%
46.497	Unidentified	1458	0.02%
47.676	Germacrene D	1477	0.62%
48.025	Unidentified	1483	0.03%
48.162	beta-Selinene	1485	0.04%
48.561	Bicyclogermacrene	1492	0.04%
49.127	trans,trans-alpha-Farnesene	1501	0.03%



Ret. Time	Component	Ret. Idx.	Conc. %	
49.944	Unidentified	1514	0.02%	
52.201	Unidentified	1552	0.02%	
55.260	Copaborneol	1604	0.08%	
58.491	Unidentified	1662	0.01%	
63.956	Unidentified	1762	0.03%	
64.582	Unidentified	1773	0.03%	
67.901	Phytone	1837	0.06%	
74.054	Unidentified	1961	0.03%	

Total Identified Compounds **97.9 %**

