



Essential Oil University

GC/MS Report

Item	Lot
Myrtle EO	8B
<i>Myrtus communis</i>	
Date	Analyst
8/29/2024	Dr. Robert S. Pappas

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The analysis of this batch sample, Myrtle EO, meets the expected chemical profile for authentic essential oil of *Myrtus communis*. 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:** Myrtle EO**Botanical Name:** Myrtus communis**Lot Number:** 8B**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Tunisia**Analysis Date:** 8/29/2024**Manufacture Date:** August 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

+26.92

1.46696

0.89655



Ret. Time	Component	Ret. Idx.	Conc. %	
6.246	Toluene	760	0%	
6.868	Acetylbutyryl	786	0.03%	
11.773	Isobutyl isobutyrate	909	0.14%	
12.214	Hashishene	917	0.03%	
12.487	alpha-Thujene	922	0.24%	
12.951	alpha-Pinene	930	28.01%	
13.741	alpha-Fenchene	944	0.02%	
13.842	Camphene	946	0.05%	
14.043	Thuja-2,4(10)diene	949	0.01%	
15.128	Sabinene	968	0.05%	
15.446	beta-Pinene	974	0.34%	
15.786	6-Methyl hept-5-en-2-one	980	0.01%	
16.069	Myrcene	985	0.33%	
16.145	Unidentified	986	0.01%	
16.861	Isobutyl 2-methylbutyrate	999	0.13%	
17.019	Pseudolimonene	1001	0.02%	
17.075	Unidentified	1002	0.02%	
17.166	alpha-Phellandrene	1004	0.05%	
17.315	delta-3-Carene	1006	0.02%	
17.493	Isoamyl isobutyrate	1009	0.01%	
17.696	2-Methylbutyl isobutyrate	1012	0.05%	
17.837	alpha-Terpinene	1014	0.11%	
18.326	para-Cymene	1021	0.52%	
18.670	Limonene	1026	15.89%	IFRA
18.883	1,8-Cineole	1029	22.75%	
19.020	cis-beta-Ocimene	1031	0.03%	
19.721	trans-beta-Ocimene	1042	0.06%	
20.104	Prenyl isobutyrate	1048	0%	
20.531	gamma-Terpinene	1054	0.43%	
21.354	cis-Linalool oxide (furanoid)	1067	0.02%	
21.485	Pinol	1069	0.01%	
22.363	Terpinolene	1082	0.12%	
22.425	trans-Linalool oxide (furanoid)	1083	0.01%	
22.669	para-Cymenene	1086	0.02%	
23.325	Linalool	1096	3.97%	IFRA
23.558	2-Methylbutyl-2-methylbutyrate	1100	0.14%	
24.012	Unidentified	1106	0.02%	
24.682	endo-Fenchol	1116	0.01%	
24.855	trans-para-Mentha-2,8-dienol	1118	0.01%	
25.202	alpha-Campholenal	1123	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
26.186	trans-Pinocarveol	1137	0.04%	
26.499	trans-Verbenol	1142	0.02%	
26.628	Camphor	1144	0.01%	
28.224	delta-Terpineol	1166	0.05%	
28.351	Borneol	1168	0.01%	
28.801	Unidentified	1175	0.01%	
28.955	Terpinen-4-ol	1177	0.2%	
29.361	para-Cymen-8-ol	1183	0.02%	
29.984	alpha-Terpineol	1192	6.52%	
30.150	Estragole	1194	0.12%	IFRA
30.779	Verbenone	1203	0.01%	
31.569	trans-Carveol	1215	0.03%	
31.939	Nerol	1220	0.01%	
32.961	Unidentified	1235	0.02%	
33.292	Carvone	1240	0.01%	IFRA
33.704	Geraniol	1246	1.09%	IFRA
34.912	Geranial	1263	0.01%	IFRA
35.215	Unidentified	1268	0%	
35.768	Unidentified	1276	0.02%	
35.960	Unidentified	1278	0.01%	
36.090	Bornyl acetate	1280	0.05%	
36.253	Isobornyl acetate	1283	0.02%	
36.543	Unidentified	1287	0.01%	
36.830	trans-Pinocarvyl acetate	1291	0.19%	
36.965	Carvacrol	1293	0.03%	
38.024	delta-Terpinyol acetate	1309	0.01%	
38.560	Unidentified	1317	0.01%	
38.695	Myrtenyl acetate	1319	9.69%	
39.282	delta-Elementene	1328	0.07%	
39.701	Unidentified	1334	0.12%	
40.227	alpha-Terpinyol acetate	1342	2.06%	
40.352	gamma-Terpinyol acetate	1344	0.22%	
40.505	Unidentified	1346	0.01%	
40.822	Unidentified	1351	0.01%	
40.990	Neryl acetate	1354	0.04%	
41.765	alpha-Ylangene	1365	0.01%	
42.286	Geranyl acetate	1373	3.42%	
42.697	trans-Myrtanol acetate	1379	0.05%	
43.069	beta-Elementene	1385	0.05%	
43.656	Methyleugenol	1394	0.38%	IFRA



Ret. Time	Component	Ret. Idx.	Conc. %
44.865	Unidentified	1413	0.01%
45.011	beta-Caryophyllene	1415	0.43%
45.612	Unidentified	1425	0.01%
45.853	Perillyl acetate	1429	0%
46.184	Alloaromadendrene	1434	0.01%
46.929	Unidentified	1446	0.03%
47.065	Unidentified	1448	0.02%
47.265	alpha-Humulene	1451	0.2%
47.532	Alloaromodendrene	1455	0.03%
47.669	Myrtenyl isobutyrate	1458	0.08%
48.152	Unidentified	1465	0.01%
48.361	Selina-4,11-diene	1469	0.02%
48.592	Unidentified	1472	0.02%
48.731	alpha-Amorphene	1474	0.03%
49.227	delta-Selinene	1482	0.02%
49.349	beta-Selinene	1484	0.11%
49.462	Viridiflorene	1486	0.01%
49.780	alpha-Selinene	1491	0.11%
50.216	Unidentified	1498	0.02%
50.466	Geranyl isobutyrate	1502	0.05%
50.795	Unidentified	1508	0.07%
51.105	delta-Cadinene	1513	0.02%
51.656	Unidentified	1522	0.01%
52.234	Selina-4(15),7(11)-diene	1532	0.02%
53.248	Unidentified	1549	0.03%
53.549	Germacrene B	1554	0.01%
54.909	Caryophyllene oxide	1577	0.04%
55.124	Globulol	1580	0.04%
55.632	Viridiflorol	1589	0.05%
55.761	Neryl (S)-2-methylbutanoate	1591	0.02%
56.230	Unidentified	1599	0.01%
56.537	Humulene epoxide II	1604	0.02%
57.066	Unidentified	1614	0.01%
59.099	alpha-Eudesmol	1649	0.03%
59.271	Unidentified	1652	0.01%
59.946	Unidentified	1664	0.01%
61.712	Unidentified	1696	0.01%

Total Identified Compounds **99.44 %**

