



Essential Oil University

GC/MS Report

Item	Lot
Lavender EO <i>Lavandula angustifolia</i>	9E
Date	Analyst
1/14/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Lavender EO, meets the expected chemical profile for authentic essential oil of *Lavandula angustifolia*. 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:** Lavender EO**Botanical Name:** Lavandula angustifolia**Lot Number:** 9E**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Bulgaria**Analysis Date:** 1/14/2025**Manufacture Date:** January 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

-8.08

1.46192

0.88019



Ret. Time	Component	Ret. Idx.	Conc. %	
3.569	2-Methyl-3-buten-2-ol	606	0.01%	
3.979	3-Methylbutanal	647	0.01%	
5.821	Toluene	763	0%	
6.984	Butyl acetate	810	0.01%	
7.387	1-Methoxyhexane	821	0.11%	
8.454	Hex-(3Z)-enol	849	0.01%	
8.949	Hexanol	862	0.05%	
11.490	Tricyclene	921	0.02%	
11.639	alpha-Thujene	923	0.11%	
11.940	Unidentified	929	0.01%	
12.039	alpha-Pinene	931	0.24%	
12.926	Camphene	947	0.16%	
14.173	Sabinene	970	0.03%	
14.470	beta-Pinene	976	0.02%	
14.513	1-Octen-3-ol	976	0.23%	
14.839	3-Octanone	982	0.98%	
15.095	Myrcene	987	0.67%	
15.459	Butyl butyrate	994	0.1%	
15.521	3-Octanol	995	0.17%	
16.060	Unidentified	1004	0.01%	
16.142	alpha-Phellandrene	1005	0.04%	
16.287	delta-3-Carene	1008	0.11%	
16.448	Hexyl acetate	1010	0.58%	
16.794	alpha-Terpinene	1015	0.06%	
16.954	ortho-Cymene	1018	0.05%	
17.274	para-Cymene	1023	0.18%	
17.565	Limonene	1027	0.32%	IFRA
17.666	beta-Phellandrene	1029	0.15%	
17.741	1,8-Cineole	1030	0.91%	
17.975	cis-beta-Ocimene	1034	5.36%	
18.646	trans-beta-Ocimene	1044	2.77%	
19.421	gamma-Terpinene	1056	0.18%	
20.209	cis-Linalool oxide (furanoid)	1068	0.22%	
20.440	Unidentified	1072	0.01%	
21.212	Terpinolene	1083	0.11%	
21.272	trans-Linalool oxide (furanoid)	1084	0.12%	
21.631	Unidentified	1090	0.02%	
22.277	Linalool	1100	32.12%	IFRA
22.426	Hotrienol	1102	0.07%	
22.523	Hexyl propionate	1103	0.05%	



Ret. Time	Component	Ret. Idx.	Conc. %	
22.691	1-Octen-3-yl acetate	1106	1.03%	IFRA
22.976	Heptyl acetate	1110	0.02%	
23.502	3-Octyl acetate	1118	0.1%	
23.831	cis-para-Menth-2-en-1-ol	1123	0.02%	
24.091	allo-Ocimene	1126	0.33%	
24.843	cis-Myroxide	1137	0.02%	
25.265	trans-para-Menth-2-en-1-ol	1143	0.01%	
25.385	Camphor	1145	0.31%	
25.531	Unidentified	1147	0.02%	
25.700	Nerol oxide	1150	0.01%	
26.516	Lavandulol	1162	0.75%	
26.929	cis-Linalool oxide (pyranoid)	1168	0.02%	
27.089	Borneol	1170	0.59%	
27.256	trans-Linalool oxide (pyranoid)	1172	0.02%	
27.351	(3E,5E)-Undeca-1,3,5-triene	1174	0.03%	
27.707	Terpinen-4-ol	1179	4.63%	
28.109	Cryptone	1185	0.16%	
28.470	Hexyl butyrate	1190	0.41%	
28.695	alpha-Terpineol	1193	1.25%	
29.610	Unidentified	1207	0.01%	
29.762	Unidentified	1209	0.02%	
30.674	Nerol	1222	0.19%	
30.960	Bornyl formate	1227	0.04%	
31.479	Hexyl 2-methylbutanoate	1234	0.03%	
31.911	Cuminal	1241	0.06%	IFRA
32.008	Carvone	1242	0.02%	IFRA
32.488	Linalyl acetate	1249	30.76%	
32.690	Unidentified	1252	0.03%	
33.200	Unidentified	1260	0.01%	
33.680	Unidentified	1267	0.01%	
33.937	Isopulegyl acetate	1270	0.03%	
34.311	Phellandral	1276	0.01%	
34.715	Lavandulyl acetate	1282	4.12%	
35.221	para-Cymen-7-ol	1289	0.02%	
37.768	Hexyl tiglate	1328	0.03%	
38.701	Unidentified	1342	0.01%	
38.885	Unidentified	1345	0.01%	
39.648	Neryl acetate	1356	0.42%	
40.753	alpha-Copaene	1373	0.01%	
40.931	Geranyl acetate	1376	0.73%	



Ret. Time	Component	Ret. Idx.	Conc. %	
41.273	beta-Bourbonene	1381	0.02%	
41.450	Hexyl hexanoate	1384	0.09%	
41.540	7-epi-Sesquithujene	1385	0.07%	
42.494	alpha-Funebrene	1400	0.02%	
43.162	cis-alpha-Bergamotene	1411	0.04%	
43.554	beta-Caryophyllene	1417	3.36%	
44.415	trans-alpha-Bergamotene	1431	0.13%	
44.887	Unidentified	1438	0.01%	
45.104	cis-beta-Farnesene	1442	0.04%	
45.283	epi-beta-Santalene	1445	0.02%	
45.668	trans-beta-Farnesene	1451	2.65%	
45.789	alpha-Humulene	1453	0.08%	
45.931	Sesquisabinene	1455	0.03%	
46.203	Unidentified	1459	0.02%	
47.383	Germacrene D	1478	0.29%	
47.573	trans-beta-Bergamotene	1481	0.05%	
48.263	Bicyclogermacrene	1492	0.01%	
48.846	(E,E)-alpha-Farnesene	1502	0.01%	
49.049	beta-Bisabolene	1505	0.02%	
49.341	gamma-Cadinene	1510	0.09%	
49.638	Unidentified	1515	0.02%	
53.397	Caryophyllene oxide	1579	0.2%	
56.854	tau-Cadinol	1639	0.05%	

Total Identified Compounds **99.78 %**

