



Essential Oil University

GC/MS Report

Item	Lot
Lavender EO <i>Lavandula angustifolia</i>	2Z
Date	Analyst
6/10/2025	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:** 2Z**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Bulgaria**Analysis Date:** 6/10/2025**Manufacture Date:** May 2025

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

-7.64

1.46296

0.87954



Ret. Time	Component	Ret. Idx.	Conc. %	
3.741	Unidentified	652	0.01%	
4.187	3-Methylbutanal	671	0.02%	
7.467	Butyl acetate	807	0.01%	
7.872	1-Methoxyhexane	817	0.1%	
9.030	Hex-(3Z)-enol	845	0.01%	
9.518	Hexanol	858	0.06%	
12.193	Tricyclene	917	0.02%	
12.343	alpha-Thujene	919	0.12%	
12.762	alpha-Pinene	927	0.25%	
13.686	Camphene	943	0.16%	
14.970	Sabinene	966	0.03%	
15.300	1-Octen-3-ol	971	0.23%	
15.633	3-Octanone	977	0.87%	
15.910	Myrcene	982	0.81%	
16.278	Butyl butyrate	989	0.1%	
16.340	3-Octanol	990	0.18%	
16.909	Unidentified	1000	0.01%	
16.995	alpha-Phellandrene	1001	0.05%	
17.142	delta-3-Carene	1003	0.13%	
17.282	Hexyl acetate	1005	0.6%	
17.663	alpha-Terpinene	1011	0.08%	
17.814	ortho-Cymene	1013	0.05%	
18.144	para-Cymene	1018	0.21%	
18.454	Limonene	1023	0.41%	IFRA
18.561	beta-Phellandrene	1025	0.17%	
18.647	1,8-Cineole	1026	0.88%	
18.860	cis-beta-Ocimene	1029	5.92%	
19.545	trans-beta-Ocimene	1039	3.31%	
20.346	gamma-Terpinene	1051	0.25%	
21.159	cis-Linalool oxide (furanoid)	1064	0.21%	
22.064	Unidentified	1077	0.01%	
22.172	Terpinolene	1079	0.17%	
22.240	trans-Linalool oxide (furanoid)	1080	0.11%	
22.488	para-Cymenene	1084	0.01%	
22.583	Rosefuran	1085	0.02%	
23.246	Linalool	1095	29.58%	IFRA
23.400	Hotrienol	1097	0.07%	
23.494	Hexyl propionate	1099	0.06%	
23.651	1-Octen-3-yl acetate	1101	1.21%	IFRA
23.947	Unidentified	1105	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %	
24.483	3-Octyl acetate	1113	0.1%	
24.830	Unidentified	1118	0.01%	
24.849	Unidentified	1118	0.02%	
25.083	allo-Ocimene	1121	0.4%	
25.906	Unidentified	1133	0.06%	
26.294	Unidentified	1139	0.01%	
26.417	Camphor	1141	0.34%	
26.554	Unidentified	1143	0.02%	
26.718	Unidentified	1145	0.01%	
27.536	Lavandulol	1157	1.01%	
27.965	cis-Linalool oxide (pyranoid)	1163	0.02%	
28.142	Borneol	1165	0.72%	
28.292	trans-Linalool oxide (pyranoid)	1167	0.02%	
28.382	(3E,5Z)-1,3,5-Undecatriene	1169	0.03%	
28.764	Terpinen-4-ol	1174	6.12%	
29.027	Unidentified	1178	0.03%	
29.147	Cryptone	1180	0.21%	
29.502	Hexyl butyrate	1185	0.53%	
29.744	alpha-Terpineol	1188	1.7%	
30.799	Unidentified	1203	0.02%	
31.726	Nerol	1217	0.19%	
31.880	Unidentified	1219	0.01%	
32.051	Bornyl formate	1222	0.05%	
32.546	Hexyl-2-methybutyrate	1229	0.04%	
32.973	Cuminal	1235	0.07%	IFRA
33.088	Carvone	1237	0.03%	IFRA
33.561	Linalyl acetate	1243	25.63%	
33.770	Unidentified	1247	0.03%	
35.003	Unidentified	1264	0.02%	
35.402	Phellandral	1270	0.01%	
35.789	Lavandulyl acetate	1276	4.5%	
36.288	para-Cymen-7-ol	1283	0.02%	
38.860	Hexyl tiglate	1321	0.04%	
39.991	alpha-Terpinyl acetate	1338	0.03%	
40.755	Neryl acetate	1350	0.49%	
41.970	alpha-Copaene	1368	0.02%	
42.042	Geranyl acetate	1370	0.93%	
42.240	Unidentified	1373	0.03%	
42.457	beta-Bourbonene	1376	0.03%	
42.571	Hexyl hexanoate	1378	0.11%	



Ret. Time	Component	Ret. Idx.	Conc. %	
42.702	7-epi-Sesquithujene	1380	0.1%	
43.655	Sesquithujene isomer	1394	0.03%	
44.342	cis-alpha-Bergamotene	1405	0.05%	
44.761	beta-Caryophyllene	1411	4.48%	
45.591	trans-alpha-Bergamotene	1424	0.24%	
46.063	Unidentified	1432	0.02%	
46.293	Unidentified	1436	0.04%	
46.476	epi-beta-Santalene	1439	0.03%	
46.828	trans-beta-Farnesene	1444	3.76%	
47.003	alpha-Humulene	1447	0.14%	
47.126	Sesquisabinene	1449	0.05%	
47.377	Unidentified	1453	0.02%	
48.595	Germacrene D	1472	0.37%	
48.771	trans-beta-Bergamotene	1475	0.06%	
49.483	Bicyclogermacrene	1486	0.01%	
50.009	trans,trans-alpha-Farnesene	1495	0.02%	
50.236	beta-Bisabolene	1498	0.03%	
50.551	gamma-Cadinene	1504	0.1%	
50.840	Unidentified	1508	0.03%	
51.200	Unidentified	1514	0.01%	
54.640	Caryophyllene oxide	1572	0.18%	
58.077	tau-Cadinol	1631	0.04%	

Total Identified Compounds **99.55 %**

