



Essential Oil University

GC/MS Report

Item	Lot
Litsea cubeba EO <i>Litsea cubeba</i>	4L
Date	Analyst
1/22/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Litsea cubeba EO, meets the expected chemical profile for authentic essential oil of *Litsea cubeba*. 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:** Litsea cubeba EO**Botanical Name:** Litsea cubeba**Lot Number:** 4L**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** China**Analysis Date:** 1/22/2025**Manufacture Date:** February 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

+9.72

1.48537

0.89162



Ret. Time	Component	Ret. Idx.	Conc. %	
9.021	Unidentified	864	0.01%	
11.696	alpha-Thujene	925	0.02%	
12.096	alpha-Pinene	932	1.01%	
12.986	Camphene	948	0.25%	
14.235	Sabinene	971	0.69%	
14.533	beta-Pinene	977	0.79%	
14.853	6-Methyl hept-5-en-2-one	983	1.06%	
15.160	Myrcene	988	0.91%	
15.349	6-Methyl-hept-5-en-2-ol	992	0.03%	
16.209	alpha-Phellandrene	1006	0.03%	
16.350	delta-3-Carene	1009	0.06%	
16.865	alpha-Terpinene	1016	0.02%	
17.342	para-Cymene	1024	0.04%	
17.659	Limonene	1029	12.4%	IFRA
17.821	1,8-Cineole	1031	1.45%	
18.037	cis-beta-Ocimene	1035	0.02%	
18.714	trans-beta-Ocimene	1045	0.03%	
19.490	gamma-Terpinene	1057	0.06%	
20.265	trans-Sabinene hydrate	1069	0.03%	
21.280	Terpinolene	1085	0.09%	
21.699	Rosefuran	1091	0.02%	
22.227	Linalool	1099	1.39%	IFRA
22.867	Unidentified	1108	0.02%	
23.719	trans-para-Mentha-2,8-dienol	1121	0.01%	
24.474	cis-Limonene oxide	1132	0.02%	
24.765	trans-Limonene oxide	1136	0.03%	
25.189	exo-Isocitral	1142	0.07%	IFRA
25.445	Camphor	1146	0.01%	
25.551	Isopulegol	1148	0.03%	
25.809	Citronellal	1151	1.55%	IFRA
26.243	Neoisopulegol	1158	0.01%	
26.434	Isoneral	1160	0.47%	IFRA
26.993	Isoborneol + delta-Terpineol	1169	0.06%	
27.152	Borneol	1171	0.08%	
27.732	Isogeranial	1179	1.06%	IFRA
28.526	Methyl salicylate	1191	0.01%	
28.760	alpha-Terpineol	1194	0.49%	
29.100	Unidentified	1199	0.02%	
29.558	cis-Carveol	1206	0.04%	
30.317	Unidentified	1217	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
30.750	Nerol	1223	0.48%	
30.941	Citronellol	1226	0.26%	IFRA
31.102	Unidentified	1229	0.02%	
31.796	Neral	1239	29.2%	IFRA
32.519	Geraniol	1250	1.18%	IFRA
32.755	Piperitone	1253	0.05%	
33.847	Geranial	1269	40.65%	IFRA
34.088	Citronellyl formate	1273	0.07%	
34.278	Unidentified	1275	0.06%	
34.410	Unidentified	1277	0.04%	
34.637	trans-Carvone oxide	1281	0.18%	IFRA
34.813	Isobornyl acetate	1283	0.04%	
35.749	Geranyl formate	1297	0.04%	
38.131	Unidentified	1333	0.07%	
38.830	Unidentified	1344	0.05%	
38.931	Neryl acetate isomer	1345	0.14%	
39.723	Neryl acetate	1358	0.03%	
39.869	Unidentified	1360	0.06%	
40.505	Unidentified	1369	0.11%	
40.830	alpha-Copaene	1374	0.07%	
40.999	Geranyl acetate	1377	0.08%	
41.724	beta-Elemene	1388	0.15%	
43.620	beta-Caryophyllene	1418	1.37%	
44.441	Unidentified	1431	0.03%	
45.731	trans-beta-Farnesene	1452	0.03%	
45.861	alpha-Humulene	1454	0.14%	
47.453	Germacrene D	1479	0.02%	
48.343	Bicyclogermacrene	1494	0.07%	
49.119	beta-Bisabolene	1506	0.03%	
49.721	delta-Cadinene	1517	0.04%	
53.159	Spathulenol	1575	0.03%	
53.466	Caryophyllene oxide	1580	0.2%	
55.084	Humulene epoxide II	1608	0.02%	
57.831	Unidentified	1656	0.01%	
63.726	Unidentified	1765	0.03%	
74.677	Unidentified	1982	0.01%	
75.570	Unidentified	2000	0.01%	
76.150	Unidentified	2013	0.01%	
76.386	Unidentified	2018	0.01%	
76.724	Unidentified	2025	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
76.886	Unidentified	2028	0.03%	
77.903	Unidentified	2050	0.16%	
78.329	Unidentified	2060	0.08%	
79.334	Unidentified	2081	0.04%	
79.525	Unidentified	2085	0.12%	
80.170	Unidentified	2099	0.03%	
81.618	Unidentified	2132	0.02%	
82.005	Unidentified	2140	0.02%	

Total Identified Compounds **98.91 %**

