



Essential Oil University

GC/MS Report

Item	Lot
Lemon Eucalyptus EO <i>Eucalyptus citriodora</i>	3Z
Date	Analyst
6/3/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Lemon Eucalyptus EO, meets the expected chemical profile for authentic essential oil of *Eucalyptus citriodora*. 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:** Lemon Eucalyptus EO**Botanical Name:** Eucalyptus citriodora**Lot Number:** 3Z**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** China**Analysis Date:** 6/3/2025**Manufacture Date:** April 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

0.00

1.45508

0.87141



Ret. Time	Component	Ret. Idx.	Conc. %	
3.588	1-Methyl-3-cyclopentene	608	0.01%	
3.732	Unidentified	623	0%	
3.975	3-Methylbutanal	647	0.01%	
8.771	trans-2-Methyl-3-octene	858	0%	
8.909	Unidentified	861	0.01%	
8.966	Unidentified	863	0.01%	
10.966	Isobutyl isobutyrate	911	0.06%	
11.070	Unidentified	913	0.01%	
11.631	alpha-Thujene	923	0.02%	
12.029	alpha-Pinene	931	0.3%	
14.163	Sabinene	970	0.06%	
14.459	beta-Pinene	975	0.5%	
15.086	Myrcene	987	0.08%	
16.130	Unidentified	1005	0.01%	
16.457	Isoamyl isobutyrate	1010	0.02%	
16.656	2-Methylbutyl isobutyrate	1013	0.01%	
16.784	alpha-Terpinene	1015	0.01%	
17.262	para-Cymene	1023	0.03%	
17.554	Limonene	1027	0.15%	IFRA
17.670	beta-Phellandrene	1029	0.02%	
17.735	1,8-Cineole	1030	0.83%	
17.866	Unidentified	1032	0.06%	
17.958	cis-beta-Ocimene	1033	0.04%	
18.636	trans-beta-Ocimene	1044	0.03%	
18.782	Unidentified	1046	0.02%	
19.056	Melonal	1050	0.13%	
19.408	gamma-Terpinene	1056	0.12%	
20.247	Unidentified	1069	0.04%	
21.195	Terpinolene	1083	0.06%	
22.145	Linalool	1098	0.49%	IFRA
22.845	cis-Rose oxide	1108	0.05%	
23.234	Unidentified	1114	0.02%	
23.942	trans-Rose oxide	1124	0.02%	
24.074	Unidentified	1126	0.03%	
25.491	Isopulegol	1147	4.93%	
25.570	Unidentified	1148	0.08%	
25.923	Citronellal	1153	68.16%	IFRA
25.995	Unidentified	1154	0.08%	
26.215	Neoisopulegol	1157	3.35%	
26.643	Isomenthone	1163	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
26.918	Isoisopulegol	1167	0.24%	
27.056	Unidentified	1169	0.01%	
27.339	Unidentified	1174	0.01%	
27.549	Neoisoisopulegol	1177	0.06%	
27.678	Terpinen-4-ol	1179	0.02%	
28.677	alpha-Terpineol	1193	0.09%	
29.858	trans-Pulegol	1210	0.02%	
30.657	Nerol	1222	0.02%	
30.837	Citronellol	1225	3.21%	IFRA
31.603	Unidentified	1236	0.01%	
32.421	Geraniol	1248	0.02%	IFRA
32.775	Unidentified	1253	0.01%	
32.875	Unidentified	1255	0.02%	
32.912	Methyl citronellate	1255	0.03%	
33.988	Citronellyl formate	1271	0.01%	
35.507	Unidentified	1293	0.01%	
36.272	Citronellic acid	1305	0.06%	
36.373	4-Vinyl guaiacol	1306	0.05%	
36.693	Unidentified	1311	0.01%	
38.321	Citriodiol isomer	1336	0.6%	
39.050	Citronellyl acetate	1347	0.64%	IFRA
39.115	Eugenol	1348	0.07%	IFRA
39.770	Citriodiol isomer	1358	0.32%	
40.429	Citriodiol isomer	1368	0.01%	
40.913	Geranyl acetate	1376	0.01%	
41.625	beta-Elementene	1387	0.02%	
41.825	Unidentified	1390	0.08%	
42.312	Methyleugenol	1397	0.08%	IFRA
43.522	beta-Caryophyllene	1416	0.6%	
45.763	alpha-Humulene	1452	0.04%	
47.345	Germacrene D	1478	0.02%	
48.238	Bicyclogermacrene	1492	0.03%	
49.621	delta-Cadinene	1515	0.02%	
53.371	Caryophyllene oxide	1578	0.03%	
69.450	Unidentified	1875	0.23%	
69.949	Unidentified	1885	0.31%	
70.475	Unidentified	1895	0.03%	
71.877	Citriodiol acetal isomer	1924	4.87%	
72.465	Citriodiol acetal isomer	1936	0.17%	
73.213	Citriodiol acetal isomer	1952	0.07%	



Ret. Time	Component	Ret. Idx.	Conc. %
74.010	Unidentified	1968	0.51%
74.373	Citriodiol acetal isomer	1975	1.18%
74.496	Citriodiol acetal isomer	1978	0.21%
74.580	Citriodiol acetal isomer	1980	0.24%
74.875	Citriodiol acetal isomer	1986	0.07%
75.243	Unidentified	1993	0.06%
75.477	Unidentified	1998	0.01%
76.952	Unidentified	2030	0.02%
77.181	Citriodiol acetal isomer	2035	0.01%
77.953	Unidentified	2051	0.02%
78.209	Citriodiol acetal isomer	2057	0.1%
78.320	Unidentified	2059	0.15%
78.480	Unidentified	2063	0.02%
78.648	Unidentified	2066	0.09%
79.059	Unidentified	2075	0.06%
79.153	Unidentified	2077	0.08%
79.295	Citriodiol acetal isomer	2080	0.02%
79.486	Citriodiol acetal isomer	2084	0.01%
80.157	Unidentified	2099	0.03%
80.873	Unidentified	2115	0.04%
81.016	Unidentified	2118	0.12%
81.090	Unidentified	2120	0.15%
96.254	Unidentified	2483	0.02%
96.491	Unidentified	2489	0.01%
97.150	Unidentified	2506	0.02%
100.050	Unidentified	2583	0.01%
100.583	Unidentified isomer I	2597	0.14%
100.728	Unidentified isomer I	2601	0.99%
101.034	Unidentified isomer I	2609	0.75%
101.110	Unidentified isomer I	2611	0.28%
101.585	Unidentified isomer I	2624	0.02%
101.714	Unidentified isomer I	2628	0.05%
101.825	Unidentified	2631	0.01%
103.839	Unidentified	2686	2.44%
105.183	Unidentified	2723	0.01%
105.900	Unidentified	2744	0.03%

Total Identified Compounds **92.78 %**

