



Essential Oil University

GC/MS Report

Item	Lot
Lemon Myrtle EO <i>Backhousia citriodora</i>	4E
Date	Analyst
10/16/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Lemon Myrtle EO, meets the expected chemical profile for authentic essential oil of *Backhousia 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 Myrtle EO**Botanical Name:** Backhousia citriodora**Lot Number:** 4E**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Australia**Analysis Date:** 10/16/2025**Manufacture Date:** August 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

-.04

1.48631

0.89207



Ret. Time	Component	Ret. Idx.	Conc. %	
3.050	Unidentified	622	0.03%	
5.813	Unidentified	741	0.01%	
5.960	Methyl 2-methylbutyrate	747	0.04%	
8.432	Hex-(3Z)-enol	831	0.1%	
8.951	Hexanol	844	0.03%	
14.737	6-Methyl hept-5-en-2-one	962	1.35%	
15.040	Myrcene	967	0.19%	PROP. 65
15.095	2,3-Dehydro-1,8-cineole	968	0.26%	
15.231	6-Methyl hept-5-en-2-ol	970	0.09%	
16.002	Unidentified isomer I	984	0.03%	
17.190	Unidentified isomer I	1004	0.04%	
17.497	Limonene	1009	0.04%	ALLERGEN IFRA
18.580	cis-beta-Ocimene	1025	0.03%	
21.455	para-Cymenene	1068	0.01%	
22.072	Linalool	1077	0.75%	ALLERGEN IFRA
22.712	Unidentified	1087	0.02%	
23.002	Unidentified	1091	0.02%	
23.563	trans-para-Mentha-2,8-dien-1-ol	1100	0.03%	
24.560	Unidentified	1114	0.02%	
25.028	exo-Isocitral	1121	0.32%	IFRA
25.375	Unidentified	1126	0.01%	
25.391	Unidentified	1126	0.02%	
25.647	Citronellal	1130	0.3%	IFRA
26.271	Isoneral	1138	1.37%	IFRA
26.815	Unidentified	1146	0.02%	
26.973	alpha-Phellandrene-8-ol	1149	0.11%	
27.564	Isogeranial	1157	2.5%	IFRA
27.946	Unidentified	1162	0.07%	
28.050	Unidentified	1164	0.01%	
28.597	alpha-Terpineol	1172	0.08%	ALLERGEN
28.665	Unidentified	1173	0.07%	
28.936	cis-Piperitol	1177	0.08%	
29.388	cis-Carveol	1183	0.2%	
30.145	Unidentified	1194	0.06%	
30.576	Nerol	1200	0.66%	
30.760	Citronellol	1203	0.1%	ALLERGEN IFRA
31.328	Unidentified	1211	0.02%	
31.583	Neral	1215	38.52%	ALLERGEN IFRA
32.343	Geraniol	1226	1.17%	ALLERGEN IFRA
32.581	Piperitone	1229	0.06%	



Ret. Time	Component	Ret. Idx.	Conc. %	
33.322	Unidentified	1240	0.05%	
33.623	Geranial	1244	50.32%	ALLERGEN IFRA
34.468	trans-Carvone oxide	1257	0.04%	IFRA
37.982	Unidentified	1308	0.03%	
39.084	Eugenol	1325	0.05%	ALLERGEN IFRA
40.356	Unidentified	1344	0.02%	
41.534	beta-Elemene	1362	0.09%	
43.425	beta-Caryophyllene	1390	0.25%	ALLERGEN
44.063	Unidentified	1400	0.01%	
45.679	Unidentified	1426	0.02%	
45.943	Aromadendrene	1430	0.03%	
47.710	Unidentified	1458	0.02%	
47.892	Viridiflorene	1461	0.03%	
48.148	Bicyclogermacrene	1465	0.15%	
49.540	Unidentified	1487	0.03%	
51.907	Unidentified	1526	0.03%	
52.981	Unidentified	1544	0.02%	

Total Identified Compounds **99.35 %**



TIC
4,727,388

