



Essential Oil University

GC/MS Report

Item	Lot
Manuka EO <i>Leptospermum scoparium</i>	1T
Date	Analyst
1/29/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Manuka EO, meets the expected chemical profile for authentic essential oil of *Leptospermum scoparium*. 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:** Manuka EO**Botanical Name:** Leptospermum scoparium**Lot Number:** 1T**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** New Zealand**Analysis Date:** 1/29/2025**Manufacture Date:** August 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

-24.76

1.50180

0.95683



Ret. Time	Component	Ret. Idx.	Conc. %	
4.035	Unidentified	647	0.01%	
4.153	Unidentified	658	0.01%	
6.500	2,3-Hexanedione (Acetylbutyryl)	789	0.02%	
8.892	Unidentified	856	0.01%	
11.857	alpha-Thujene	924	0.02%	
12.259	alpha-Pinene	931	0.58%	
14.417	Sabinene	970	0.01%	
14.715	beta-Pinene	976	0.09%	
15.351	Myrcene	987	0.4%	
16.277	Hex-(3Z)-enyl acetate	1003	0.03%	
16.729	Isoamyl isobutyrate	1010	0.01%	
17.066	Unidentified	1015	0.02%	
17.540	para-Cymene	1023	0.08%	
17.838	Limonene	1027	0.08%	IFRA
18.002	1,8-Cineole	1030	0.24%	
18.921	Unidentified	1044	0.01%	
19.705	gamma-Terpinene	1056	0.09%	
21.514	Unidentified	1084	0.02%	
22.456	Unidentified	1098	0.07%	
22.899	Isoamyl isovalerate	1105	0.1%	
23.045	2-Methylbutyl isovalerate	1107	0.04%	
23.553	3-Methylbut-3-enyl 3-methylbutyrate	1114	0.07%	
26.633	Unidentified	1159	0.01%	
28.002	Terpinen-4-ol	1179	0.06%	
28.776	Unidentified	1190	0.02%	
28.918	2-Methyl-1-butyl tiglate	1192	0.1%	
28.997	alpha-Terpineol	1193	0.05%	
29.400	Unidentified	1199	0.02%	
32.265	Unidentified	1241	0.01%	
34.491	Unidentified	1274	0.03%	
35.851	Unidentified	1294	0.02%	
39.262	alpha-Cubebene	1345	4.69%	
39.729	Unidentified	1352	0.02%	
40.701	alpha-Ylangene	1367	0.2%	
40.795	Unidentified	1369	0.03%	
41.132	alpha-Copaene	1374	5.02%	
41.529	Elemene isomer	1380	0.04%	
41.638	Unidentified	1382	0.05%	
41.714	Unidentified	1383	0.05%	
41.910	Unidentified	1386	0.07%	



Ret. Time	Component	Ret. Idx.	Conc. %	
42.014	beta-Elemene	1387	1.57%	
42.152	Unidentified	1389	0.01%	
42.313	Benzyl isovalerate	1392	0.26%	
43.137	alpha-Gurjunene	1405	1.02%	
43.378	Unidentified	1408	0.01%	
43.529	Unidentified	1411	0.03%	
43.922	beta-Caryophyllene	1417	3.01%	
44.381	Unidentified	1425	0.04%	
44.575	beta-Copaene	1428	0.27%	
44.782	trans-alpha-Bergamotene	1431	0.11%	
45.102	Aromadendrene	1436	1.68%	
45.288	Guaia-6,9-diene	1439	0.13%	
45.539	Unidentified	1443	0.12%	
45.600	Unidentified	1444	0.06%	
45.773	Cadina-3,5-diene	1447	5.34%	
46.009	Unidentified	1451	0.05%	
46.158	alpha-Humulene	1453	0.33%	
46.303	Unidentified	1455	0.02%	
46.439	Alloaromodendrene	1458	0.59%	
46.577	Unidentified	1460	0.01%	
47.066	Unidentified	1468	0.09%	
47.209	trans-Cadina-1(6),4-diene	1470	4.35%	
47.260	Selina-4,11-diene	1471	0.89%	
47.382	gamma-Murolene	1473	1.06%	
47.500	Unidentified	1475	0.12%	
47.644	alpha-Amorphene	1477	0.2%	
47.752	Germacrene D	1479	0.13%	
47.970	Unidentified	1482	0.05%	
48.263	beta-Selinene	1487	6.53%	
48.407	gamma-Amorphene	1489	1.9%	
48.703	alpha-Selinene	1494	6.41%	
48.842	alpha-Murolene	1496	0.77%	
49.106	delta-Cadinene	1500	0.21%	
49.218	trans,trans-alpha-Farnesene	1502	1.46%	
49.365	Unidentified	1505	0.02%	
49.440	Unidentified	1506	0.02%	
49.716	gamma-Cadinene	1511	0.8%	
49.845	Unidentified	1513	0.02%	
50.063	delta-Cadinene	1516	5.79%	
50.255	trans-Calamenene	1520	8.12%	



Ret. Time	Component	Ret. Idx.	Conc. %	
50.310	Zonarene	1521	1.44%	
50.897	trans-Cadina-1,4-diene	1530	5.66%	
51.120	Flavesone	1534	6.09%	
51.378	alpha-Calacorene	1539	0.39%	
51.555	Unidentified	1542	0.03%	
52.414	Germacrene B	1556	0.01%	
52.613	Unidentified	1559	0.14%	
52.819	Unidentified	1563	0.09%	
53.121	Unidentified	1568	0.1%	
53.462	Spathulenol	1574	0.34%	
53.777	Caryophyllene oxide	1579	0.3%	
54.002	Globulol	1583	0.22%	
54.070	Gleenol	1584	0.13%	
54.253	Unidentified	1587	0.01%	
54.504	Viridiflorol	1591	0.09%	
54.630	Guaiol	1593	0.07%	
55.095	Ledol	1601	0.11%	
55.270	Unidentified	1604	0.02%	
55.490	Isoleptospermone	1608	4.05%	
55.837	Unidentified	1615	0.11%	
56.081	Leptospermone	1619	11.15%	
56.210	Unidentified	1621	0.12%	
56.443	Epicubenol	1625	0.71%	
56.718	Unidentified	1630	0.08%	
56.795	Unidentified	1632	0.04%	
56.966	Unidentified	1635	0.01%	
57.294	Epicubenol isomer	1640	1.11%	
57.484	alpha-Muurolol	1644	0.07%	
57.626	Unidentified	1646	0.02%	
57.978	Unidentified	1653	0.21%	
58.135	Intermedeol	1655	0.27%	
58.486	Unidentified	1662	0.02%	
58.777	Unidentified	1667	0.05%	
58.949	Cadalene	1670	0.14%	
59.261	beta-Copaen-4-alfa-ol	1675	0.1%	
60.886	Unidentified	1705	0.01%	
61.462	Unidentified	1715	0.04%	
61.845	Unidentified	1722	0.08%	
63.095	Unidentified	1746	0.01%	
63.995	Benzyl benzoate	1763	0.03%	IFRA



Ret. Time	Component	Ret. Idx.	Conc. %	
65.274	Unidentified	1786	0.03%	
83.244	Grandiflorone	2159	0.21%	

Total Identified Compounds **97.64 %**

