



Essential Oil University

GC/MS Report

Item	Lot
NOP Tea Tree EO <i>Melaleuca alternifolia</i>	5AL
Date	Analyst
4/29/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, NOP Tea Tree EO, meets the expected chemical profile for authentic essential oil of *Melaleuca alternifolia*. 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:** NOP Tea Tree EO**Botanical Name:** Melaleuca alternifolia**Lot Number:** 5AL**Production Method:** Steam distilled**Sample Type:** EO - Certified Organics**Country of Origin:** South Africa**Analysis Date:** 4/29/2025**Manufacture Date:** November 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

+9.84

1.47746

0.89692



Ret. Time	Component	Ret. Idx.	Conc. %	
4.099	Unidentified	660	0.01%	
8.475	Hex-(3Z)-enol	850	0.02%	
11.663	alpha-Thujene	924	0.71%	
12.065	alpha-Pinene	931	2.26%	
12.840	Unidentified	946	0%	
12.948	Camphene	948	0.01%	
14.196	Sabinene	971	0.2%	
14.493	beta-Pinene	976	0.61%	
15.119	Myrcene	988	0.81%	
16.020	Pseudolimonene	1003	0.01%	
16.166	alpha-Phellandrene	1006	0.38%	
16.685	1,4-Cineole	1014	0.03%	
16.844	alpha-Terpinene	1016	9.92%	
17.303	para-Cymene	1023	2.24%	
17.596	Limonene	1028	0.91%	IFRA
17.700	beta-Phellandrene	1029	0.63%	
17.775	1,8-Cineole	1031	2.92%	
18.674	trans-beta-Ocimene	1044	0.01%	
19.506	gamma-Terpinene	1057	20.31%	
20.216	trans-Sabinene hydrate	1068	0.03%	
21.239	Terpinolene	1084	3.22%	
21.552	para-Cymenene	1089	0.06%	
22.180	Linalool	1098	0.05%	IFRA
22.255	cis-Sabinene hydrate	1100	0.07%	
23.076	Unidentified	1112	0.01%	
23.493	endo-Fenchol	1118	0.01%	
23.853	cis-para-Menth-2-en-1-ol	1123	0.23%	
24.547	Unidentified	1133	0.02%	
24.629	Terpin-3-en-1-ol	1134	0.02%	
25.079	trans-para-Menth-2-en-1-ol	1141	0.16%	
27.037	Unidentified	1169	0.01%	
27.133	Unidentified	1171	0.01%	
27.877	Terpinen-4-ol	1181	43.62%	
28.154	para-Cymen-8-ol	1185	0.06%	
28.544	Unidentified	1191	0.01%	
28.739	alpha-Terpineol	1194	3.03%	
28.844	cis-Piperitol	1196	0.05%	
29.663	trans-Piperitol	1208	0.09%	
30.693	Nerol	1223	0.02%	
32.456	Geraniol	1249	0.01%	IFRA



Ret. Time	Component	Ret. Idx.	Conc. %	
32.688	Unidentified	1252	0.01%	
32.944	Unidentified	1256	0.01%	
34.054	cis-Ascaridol glycol	1272	0.03%	
35.234	trans-Ascaridol glycol	1289	0.02%	
35.685	Unidentified	1296	0.01%	
35.961	Unidentified	1300	0%	
36.109	Unidentified	1302	0.01%	
37.200	Unidentified	1319	0.03%	
37.908	delta-Elemene	1330	0.02%	
38.899	alpha-Cubebene	1345	0.03%	
40.443	Isodene	1369	0.04%	
40.774	alpha-Copaene	1374	0.11%	
40.989	Unidentified	1377	0.01%	
41.664	beta-Elemene	1387	0.01%	
41.908	Unidentified	1391	0.01%	
42.354	Methyleugenol	1398	0.02%	IFRA
42.780	alpha-Gurjunene	1404	0.21%	
43.025	beta-Maaliene	1408	0.02%	
43.171	Unidentified	1411	0.02%	
43.557	beta-Caryophyllene	1417	0.25%	
44.029	gamma-Maaliene	1424	0.05%	
44.230	Unidentified	1428	0.02%	
44.469	alpha-Maaliene	1432	0.05%	
44.740	Aromadendrene	1436	0.75%	
44.835	Unidentified	1437	0.09%	
44.950	Unidentified	1439	0.04%	
45.198	alpha-Guaiene	1443	0.12%	
45.401	cis-Murrola-3,5-diene	1446	0.07%	
45.645	Valerna-4,7(11)-diene	1450	0.02%	
45.798	alpha-Humulene	1453	0.05%	
46.076	Alloaromadendrene	1457	0.36%	
46.837	cis-Murrola-4(14),5-diene	1469	0.24%	
47.015	Unidentified	1472	0.02%	
47.773	delta-Selinene	1485	0.11%	
47.865	beta-Selinene	1486	0.14%	
48.010	Viridiflorene	1488	0.66%	
48.279	Bicyclogermacrene	1493	0.43%	
48.480	alpha-Murolene	1496	0.11%	
48.684	Unidentified	1499	0.02%	
48.838	Unidentified	1502	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %	
49.354	gamma-Cadinene	1510	0.02%	
49.664	delta-Cadinene	1516	0.74%	
49.860	cis-Calamenene	1519	0.09%	
49.932	Zonarene	1520	0.2%	
50.508	trans-Cadina-1,4-diene	1530	0.13%	
51.011	Unidentified	1538	0.01%	
51.927	Unidentified	1554	0.02%	
52.249	Unidentified	1559	0.11%	
52.515	Unidentified	1564	0.01%	
52.700	Maaliol	1567	0.05%	
52.705	Palustrol	1567	0.05%	
53.097	Spathulenol	1574	0.07%	
53.424	Unidentified	1579	0.02%	
53.630	Globulol	1583	0.38%	
54.133	Viridiflorol	1591	0.2%	
54.277	Guaiol	1594	0.16%	
54.727	Ledol	1601	0.05%	
54.862	Rosifoliol	1604	0.1%	
55.846	beta-Eudesmol	1621	0.17%	
56.057	Epicubenol	1625	0.2%	
56.326	Unidentified	1630	0.04%	
56.910	Epicubenol analogue	1640	0.11%	
57.116	delta-Cadinol	1644	0.04%	
57.770	Unidentified	1655	0%	

Total Identified Compounds **99.39 %**

