



Essential Oil University

GC/MS Report

Item	Lot
NOP Tea Tree EO <i>Melaleuca alternifolia</i>	4N
Date	Analyst
3/3/2025	Dr. Robert S. Pappas

© Copyright 2025 by Essential Oil University. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Essential Oil University is strictly prohibited.

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:** 4N**Production Method:** Steam distilled**Sample Type:** EO - Certified Organics**Country of Origin:** South Africa**Analysis Date:** 3/3/2025**Manufacture Date:** May 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

+9.64

1.47694

0.89579



Ret. Time	Component	Ret. Idx.	Conc. %	
4.168	2-Methylbutanal	728	0.01%	
4.386	3-Penten-2-ol	734	0.01%	
8.654	Hex-(3Z)-enol	841	0.04%	
11.921	alpha-Thujene	916	0.91%	
12.329	alpha-Pinene	924	2.37%	
13.223	Camphene	939	0.01%	
14.493	Sabinene	962	0.17%	
14.791	beta-Pinene	967	0.73%	
15.270	Unidentified	976	0%	
15.425	Myrcene	979	0.91%	
16.355	trans-3-Hexenyl acetate	995	0.04%	
16.485	alpha-Phellandrene	997	0.43%	
17.008	1,4-Cineole	1006	0.02%	
17.166	alpha-Terpinene	1008	10.99%	
17.627	para-Cymene	1015	1.76%	
17.929	Limonene	1020	0.99%	IFRA
18.034	beta-Phellandrene	1021	0.67%	
18.103	1,8-Cineole	1022	3.64%	
19.023	trans-beta-Ocimene	1036	0.01%	
19.840	gamma-Terpinene	1048	20.49%	
20.555	trans-Sabinene hydrate	1059	0.08%	
21.601	Terpinolene	1075	3.61%	
21.913	para-Cymenene	1080	0.03%	
22.542	Linalool	1089	0.05%	IFRA
22.615	Sabinene hydrate isomer	1090	0.1%	
23.865	endo-Fenchol	1109	0.01%	
24.228	cis-para-Menth-2-en-1-ol	1114	0.23%	
24.930	Unidentified	1124	0.01%	
25.005	Terpinenol isomer	1125	0.02%	
25.455	trans-para-Menth-2-en-1-ol	1131	0.2%	
28.238	Terpinen-4-ol	1171	42.41%	
28.533	para-Cymen-8-ol	1176	0.03%	
28.929	Unidentified	1181	0.04%	
29.119	alpha-Terpineol	1184	3.25%	
29.238	cis-Piperitol	1186	0.08%	
30.059	trans-Piperitol	1198	0.15%	
31.091	Nerol	1213	0.01%	
32.870	Nerol isomer	1239	0.01%	
34.455	cis-Ascaridol glycol	1262	0.05%	
35.633	trans-Ascaridol glycol	1279	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
36.363	Unidentified	1289	0.01%	
37.107	Unidentified	1300	0.01%	
37.605	Unidentified	1308	0.08%	
38.351	delta-Elemene	1319	0.02%	
39.349	alpha-Cubebene	1334	0.03%	
39.590	Eugenol	1338	0.07%	IFRA
40.278	Unidentified	1348	0.01%	
40.890	Isodene	1358	0.03%	
41.225	alpha-Copaene	1363	0.08%	
41.435	Unidentified	1366	0%	
42.111	beta-Elemene	1376	0.01%	
42.769	4-Allylveratrole	1386	0.01%	
43.241	alpha-Gurjunene	1393	0.17%	
43.480	beta-Maaliene	1397	0.02%	
43.641	Aromadendrene	1399	0.01%	
44.016	beta-Caryophyllene	1405	0.19%	
44.486	gamma-Maaliene	1413	0.04%	
44.694	Calarene	1416	0.01%	
44.935	alpha-Maaliene	1420	0.04%	
45.206	beta-Copaene	1424	0.52%	
45.298	Unidentified	1426	0.07%	
45.413	Unidentified	1428	0.02%	
45.656	alpha-Guaiene	1431	0.07%	
45.745	Unidentified	1433	0.01%	
45.861	Cadina-3,5-diene	1435	0.06%	
46.099	Valerna-4,7(11)-diene	1439	0.01%	
46.261	alpha-Humulene	1441	0.04%	
46.540	Alloaromodendrene	1446	0.26%	
47.300	cis-Murrola-4(14),5-diene	1458	0.2%	
47.483	gamma-Murolene	1461	0.01%	
48.225	delta-Selinene	1473	0.11%	
48.331	beta-Selinene	1474	0.12%	
48.479	Viridiflorene	1477	0.66%	
48.744	Bicyclogermacrene	1481	0.43%	
48.944	alpha-Murolene	1484	0.08%	
49.289	Unidentified	1489	0.01%	
50.129	delta-Cadinene	1503	0.58%	
50.320	cis-Calamenene	1506	0.04%	
50.397	Zonarene	1508	0.15%	
50.971	trans-Cadine-1,4-diene	1517	0.1%	



Ret. Time	Component	Ret. Idx.	Conc. %	
52.408	Unidentified	1541	0.01%	
52.718	Gleenol	1547	0.06%	
53.145	Maaliol	1554	0.02%	
53.204	Palustrol	1555	0.03%	
53.568	Spathulenol	1561	0.03%	
54.105	Globulol	1570	0.21%	
54.608	Viridiflorol	1578	0.12%	
54.749	Cubeban-11-ol	1581	0.1%	
55.205	Ledol	1588	0.03%	
55.327	Rosifoliol	1590	0.05%	
56.322	Eudesm-5-en-11-ol	1607	0.09%	
56.530	1-Epicubenol	1611	0.12%	
56.799	Unidentified	1616	0.04%	
57.385	Unidentified	1626	0.07%	
57.584	alpha-Muurolol	1630	0.03%	

Total Identified Compounds **99.62 %**

