



Essential Oil University

GC/MS Report

Item	Lot
NOP Peppermint EO <i>Mentha piperita</i>	7R
Date	Analyst
12/15/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, NOP Peppermint EO, meets the expected chemical profile for authentic essential oil of *Mentha piperita*. 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 Peppermint EO
Botanical Name: Mentha piperita
Lot Number: 7R
Production Method: Steam distilled

Sample Type: EO - Certified Organics
Country of Origin: India
Analysis Date: 12/15/2025
Manufacture Date: June 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra
Injection Type: Split
Split Ratio: 24.4

Column Type: ZB-5
Injection Volume: 0.1 μ L
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

-21.80
1.45983
0.90271



Ret. Time	Component	Ret. Idx.	Conc. %	
4.175	3-Methylbutanal	671	0.01%	
5.324	1-Pentanol	720	0%	
5.407	Unidentified	724	0%	
10.617	2,5-Diethyltetrahydrofuran	885	0.02%	
12.131	alpha-Thujene	916	0.04%	
12.537	alpha-Pinene	923	1.11%	ALLERGEN
13.209	3-Methylcyclohexanol	935	0.03%	
13.440	Camphene	939	0.03%	
13.554	3-Methylcyclohexanone	941	0.03%	
13.728	Unidentified	944	0.01%	
14.358	Unidentified	955	0.02%	
14.561	trans-Pinane	958	0.01%	
14.705	Sabinene	961	0.19%	
15.008	beta-Pinene	966	1.23%	ALLERGEN
15.055	Unidentified	967	0.09%	
15.280	para-Menthene isomer	971	0.03%	
15.407	para-Menth-3-ene	973	0.11%	
15.514	para-Menthene isomer	975	0.01%	
15.635	Myrcene	977	0.24%	PROP. 65
15.861	trans-para-Menthane	981	0.03%	
16.060	3-Octanol	985	0.04%	
16.198	Unidentified	987	0.01%	
16.549	Pseudolimonene	993	0.03%	
16.625	Unidentified	995	0.01%	
16.692	alpha-Phellandrene	996	0.02%	
16.847	delta-3-Carene	999	0.01%	
17.222	1,4-Cineole	1004	0.01%	
17.358	alpha-Terpinene	1007	0.1%	ALLERGEN
17.785	para-Menth-1-ene	1013	0.06%	
17.829	para-Cymene	1014	0.19%	
18.132	Limonene	1018	2.46%	ALLERGEN IFRA
18.245	beta-Phellandrene	1020	0.02%	
18.315	1,8-Cineole	1021	6.58%	
18.526	cis-beta-Ocimene	1024	0.03%	
19.207	trans-beta-Ocimene	1034	0.01%	
19.997	gamma-Terpinene	1046	0.1%	
20.765	trans-Sabinene hydrate	1058	0.27%	
21.802	Terpinolene	1073	0.05%	ALLERGEN
22.107	para-Cymenene	1078	0.01%	
22.582	3-Nonanol	1085	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
22.735	Linalool	1087	0.08%	ALLERGEN IFRA
22.790	Unidentified	1088	0.02%	
22.967	2-Methylbutyl-2-methylbutyrate	1091	0.01%	
24.168	Unidentified	1108	0.01%	
24.439	Unidentified	1112	0.01%	
25.584	trans-dihydro-beta-Terpineol	1129	0.02%	
25.995	Unidentified	1135	0.01%	
26.086	Unidentified	1136	0.08%	
26.157	trans-dihydro- alpha-Terpineol	1137	0.14%	
26.405	Unidentified	1140	0.1%	
26.637	Menthone	1144	27.44%	
26.801	Unidentified	1146	0.08%	
26.925	Unidentified	1148	0.01%	
27.121	Menthofuran	1151	3.01%	
27.219	Isomenthone	1152	5.28%	
27.559	Neomenthol	1157	2.89%	ALLERGEN
27.710	Unidentified	1159	0.01%	
27.944	trans-Isopulegone	1162	0.26%	
28.173	Menthol	1166	37.06%	ALLERGEN
28.328	Terpinen-4-ol	1168	0.15%	
28.467	Isomenthol	1170	0.02%	ALLERGEN
28.865	Neoisomenthol	1176	0.18%	ALLERGEN
29.077	Unidentified	1179	0.05%	
29.297	alpha-Terpineol	1182	0.31%	ALLERGEN
29.982	para-propyl-Anisole	1192	0.01%	
31.975	Unidentified	1220	0.01%	
32.105	Unidentified	1222	0.01%	
32.231	Pulegone	1224	1.48%	PROP. 65
32.617	Carvone	1230	0.02%	ALLERGEN IFRA
33.299	Piperitone	1240	0.11%	
33.937	Unidentified	1249	0.03%	
34.485	Unidentified	1257	0.01%	
34.590	Neomenthyl acetate	1258	0.13%	
35.778	Menthyl acetate	1276	4.37%	
36.800	Isomenthyl acetate	1291	0.02%	
41.035	alpha-Ylangene	1354	0.01%	
41.480	beta-Bourbonene	1361	0.03%	
41.833	Unidentified	1366	0.01%	
41.972	alpha-Bourbonene	1368	0.03%	
42.338	beta-Elemene	1374	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %	
43.307	cis-beta-Caryophyllene	1389	0.01%	ALLERGEN
43.621	Unidentified	1393	0.02%	
43.698	Unidentified	1395	0.03%	
44.254	beta-Caryophyllene	1403	2.63%	ALLERGEN
44.771	Unidentified	1411	0.02%	
44.889	Isogermacrene D	1413	0.04%	
45.010	Unidentified	1415	0.01%	
45.800	Unidentified	1428	0.01%	
46.208	Unidentified	1434	0.01%	
46.347	trans-beta-Farnesene	1436	0.02%	
46.493	alpha-Humulene	1439	0.03%	
47.727	trans-Cadina-1(6),4-diene	1458	0.02%	
48.080	Germacrene D	1464	0.16%	
48.582	Unidentified	1472	0%	
48.964	Bicyclgermacrene	1478	0.05%	
49.165	Unidentified	1481	0.05%	
50.352	delta-Cadinene	1500	0.03%	
54.087	Caryophyllene oxide	1563	0.02%	
54.808	Viridiflorol	1575	0.01%	

Total Identified Compounds **99.21 %**



TIC
15,009,750

