



# Essential Oil University

## GC/MS Report

Item	Lot
<b>Bergamot Mint EO</b> <i>Mentha citrata</i>	<b>7E</b>
Date	Analyst
<b>11/13/2025</b>	<b>Dr. Robert S. Pappas</b>

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**The analysis of this batch sample, Bergamot Mint EO, meets the expected chemical profile for authentic essential oil of *Mentha citrata*. 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:** Bergamot Mint EO  
**Botanical Name:** Mentha citrata  
**Lot Number:** 7E  
**Production Method:** Steam distilled

**Sample Type:** EO - Single  
**Country of Origin:** USA  
**Analysis Date:** 11/13/2025  
**Manufacture Date:** September 2025

## GC/MS

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

**Column Type:** ZB-5  
**Injection Volume:** 0.1  $\mu$ 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

-12.48  
1.46026  
0.88703



Ret. Time	Component	Ret. Idx.	Conc. %	
4.207	3-Methylbutanal	635	0.02%	
5.407	1-Pentanol	727	0.02%	
5.489	2-Methylbutanol	731	0.01%	
10.863	2,5-Diethyltetrahydrofuran	894	0.02%	
12.406	alpha-Thujene	923	0.03%	
12.831	alpha-Pinene	931	0.13%	ALLERGEN
13.761	Camphene	947	0.01%	
15.049	Sabinene	970	0.18%	
15.369	beta-Pinene	975	1.47%	ALLERGEN
15.733	3-Octanone	982	0.01%	
15.986	Myrcene	986	1.02%	PROP. 65
16.430	3-Octanol	994	0.06%	
16.991	cis-Dehydrolinalool oxide	1004	0.01%	
17.085	alpha-Phellandrene	1005	0.01%	
17.386	Unidentified	1009	0.01%	
17.596	2-Methylbutyl isobutyrate	1013	0.01%	
17.744	alpha-Terpinene	1015	0.04%	ALLERGEN
18.226	para-Cymene	1022	0.21%	
18.532	Limonene	1027	0.97%	ALLERGEN IFRA
18.645	beta-Phellandrene	1028	0.03%	
18.738	1,8-Cineole	1030	0.36%	
18.924	cis-beta-Ocimene	1033	0.86%	
19.622	trans-beta-Ocimene	1043	0.79%	
20.438	gamma-Terpinene	1055	0.24%	
21.266	cis-Linalool oxide (furanoid)	1068	0.07%	
22.274	Terpinolene	1083	0.19%	ALLERGEN
22.346	trans-Linalool oxide (furanoid)	1084	0.08%	
23.338	Linalool	1099	39.54%	ALLERGEN IFRA
23.478	2-Methylbutyl-2-methylbutyrate	1101	0.2%	
23.613	Unidentified	1103	0.03%	
23.750	1-Octen-3-yl acetate	1105	0.26%	IFRA
23.820	Unidentified	1106	0.03%	
24.580	3-Octyl acetate	1117	0.31%	
25.183	allo-Ocimene	1126	0.06%	
26.636	Isopulegol	1146	0.02%	
27.159	Menthone	1154	0.28%	
27.478	trans-Pinocamphone	1159	0.03%	
27.782	Isomenthone	1163	0.11%	
28.119	Neomenthol	1168	0.1%	ALLERGEN
28.425	trans-Linalool oxide (pyranoid)	1172	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
28.567	cis-Pinocamphone	1174	1.07%	
28.670	Menthol	1176	2.98%	ALLERGEN
28.871	Terpinen-4-ol	1179	0.07%	
29.342	2,6-Dimethyl-3,7-octadiene-2,6-diol	1185	0.04%	
29.445	Unidentified	1187	0.01%	
29.627	Methyl salicylate	1189	0.01%	ALLERGEN
29.875	alpha-Terpineol	1193	2.2%	ALLERGEN
30.069	Estragole	1196	0.12%	PROP. 65 IFRA
30.494	Unidentified	1202	0.02%	
31.308	Unidentified	1214	0.01%	
31.846	Nerol	1222	0.31%	
32.648	cis-3-Hexenyl isovalerate	1233	0.01%	IFRA
32.830	Pulegone	1236	0.04%	PROP. 65
33.215	Carvone	1242	0.02%	ALLERGEN IFRA
33.658	Linalyl acetate	1248	37.31%	ALLERGEN
33.901	Piperitone	1252	0.04%	
34.851	Geranial	1265	0.01%	ALLERGEN IFRA
35.171	Unidentified	1270	0.01%	
36.344	Menthyl acetate	1287	0.2%	
36.860	Carvacrol	1295	0.02%	
38.557	Myrtenyl acetate	1320	0.04%	
39.145	Unidentified	1329	0.02%	
39.828	Myrcen-8-yl acetate	1340	0.03%	
39.935	Unidentified	1341	0.01%	
40.111	alpha-Terpinyl acetate	1344	0.04%	
40.292	Citronellyl acetate	1347	0.02%	IFRA
40.391	Eugenol	1348	0.06%	ALLERGEN IFRA
40.868	Neryl acetate	1355	0.77%	
42.159	Geranyl acetate	1375	1.53%	ALLERGEN
42.325	Unidentified	1378	0.02%	
42.579	beta-Bourbonene	1381	0.05%	
42.668	Unidentified isomer I	1383	0.06%	
42.928	beta-Elemene	1387	0.08%	
43.083	cis-Jasmone	1389	0.02%	
43.482	Unidentified isomer I	1395	0.02%	
44.191	Unidentified	1406	0.01%	
44.874	beta-Caryophyllene	1417	3.03%	ALLERGEN
45.514	beta-Copaene	1427	0.01%	
46.923	trans-beta-Farnesene	1450	0.19%	
47.123	alpha-Humulene	1453	0.11%	

Ret. Time	Component	Ret. Idx.	Conc. %
47.392	Alloaromodendrene	1457	0.03%
48.313	gamma-Muurolene	1472	0.02%
48.710	Germacrene D	1478	0.54%
49.600	Bicyclogermacrene	1493	0.01%
49.791	alpha-Muurolene	1496	0.01%
50.660	gamma-Cadinene	1510	0.01%
50.960	delta-Cadinene	1515	0.04%
51.282	beta-Dihydroagarofuran	1520	0.06%
52.743	Elemol	1545	0.22%
54.760	Caryophyllene oxide	1579	0.14%
55.489	Viridiflorol	1591	0.32%
55.662	Rosifoliol	1594	0.02%
57.633	gamma-Eudesmol	1629	0.04%
58.947	alpha-Eudesmol	1652	0.09%

Total Identified Compounds **99.75 %**



TIC  
16,343,919

