



Essential Oil University

GC/MS Report

Item	Lot
Catnip EO <i>Nepeta cataria</i>	7B

Date	Analyst
5/8/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Catnip EO, meets the expected chemical profile for authentic essential oil of *Nepeta cataria*. 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: Catnip EO
Botanical Name: Nepeta cataria
Lot Number: 7B
Production Method: Steam distilled

Sample Type: EO - Single
Country of Origin: Canada
Analysis Date: 5/8/2025
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

-11.00
1.48927
1.04861



Ret. Time	Component	Ret. Idx.	Conc. %	
4.057	3-Methylbutanal	726	0.02%	
4.162	2-Methylbutanal	728	0.03%	
4.598	2-Ethylfuran	739	0.05%	
5.810	Senecionitrile	770	0.02%	
6.105	Methyl 2-methylbutyrate	777	0.03%	
6.787	Hexanal	794	0.02%	
7.576	Unidentified	814	0.01%	
8.595	Hex-(2E)-enal	840	0.09%	IFRA
10.247	Styrene	881	0.04%	
11.918	alpha-Thujene	916	0.02%	
12.322	alpha-Pinene	923	0.08%	
14.490	Sabinene	962	0.07%	
14.790	beta-Pinene	967	0.67%	
15.175	3-Octanone	974	0.01%	
15.454	2-Pentyl furan	979	0.02%	
17.144	alpha-Terpinene	1008	0.03%	
17.625	para-Cymene	1015	0.01%	
17.925	Limonene	1019	0.04%	IFRA
18.327	cis-beta-Ocimene	1026	0.07%	
19.010	trans-beta-Ocimene	1036	0.24%	
19.788	gamma-Terpinene	1048	0.03%	
22.539	Linalool	1089	0.03%	IFRA
22.901	Nonanal	1095	0.01%	
28.095	Terpinen-4-ol	1169	0.01%	
28.861	Unidentified	1180	0.1%	
29.095	Unidentified	1184	0.01%	
29.831	Unidentified	1194	0%	
30.413	Unidentified	1203	0.59%	
32.420	Carvone	1232	0.08%	IFRA
34.067	Geranial	1256	0.01%	IFRA
36.322	Tridecane	1289	0.02%	
39.663	Nepetalactone analogue	1339	0.03%	
39.947	Nepetalactone analogue	1343	0.03%	
40.307	cis,trans-Nepetalactone	1349	22.41%	
40.575	Nepetalactone analogue	1353	0.1%	
41.358	Unidentified	1365	0.03%	
41.786	cis-3-Hexenyl-cis-3-hexenoate	1371	0.09%	
41.920	Unidentified	1373	0.01%	
42.346	4a-alpha,7-beta,7a-alpha-Nepetalactone	1380	57.16%	
42.584	cis,cis-Nepetalactone	1383	1.79%	



Ret. Time	Component	Ret. Idx.	Conc. %	
43.091	cis-beta-Caryophyllene	1391	0.29%	
43.860	Unidentified lactone	1403	0.09%	
44.037	trans-beta-Caryophyllene	1406	5.56%	
44.692	Unidentified	1416	0.02%	
45.222	Unidentified	1425	0.01%	
45.425	Unidentified	1428	0.01%	
46.118	trans-beta-Farnesene	1439	0.32%	
46.267	alpha-Humulene	1441	0.48%	
46.658	Octadecane	1447	0.06%	
46.816	gamma-Decalactone	1450	0.02%	
47.062	Unidentified	1454	0.03%	
47.323	Unidentified	1458	0.03%	
47.674	trans-beta-Ionone	1464	0.01%	
48.185	Unidentified	1472	0.21%	
49.282	Unidentified	1489	0.04%	
50.880	Nepetic acid	1516	2.15%	
51.230	Unidentified	1522	0%	
53.249	cis-3-Hexenyl benzoate	1555	0.02%	
53.889	Caryophyllene oxide	1566	0.78%	
55.506	Humulene epoxide II	1593	0.04%	
58.377	Unidentified	1644	0.02%	
59.027	Unidentified	1655	0.02%	
65.928	Nepetalic acid isomer	1782	0.53%	
66.103	Unidentified	1785	0.18%	
66.452	Nepetalic acid	1791	3.07%	
66.689	Unidentified	1796	0.51%	
66.875	Unidentified	1799	0.01%	
67.085	Unidentified	1803	0.01%	
67.228	Nepetalic acid isomer	1806	0.1%	
67.534	Unidentified	1812	0.02%	
67.903	Nepetalic acid isomer	1819	0.03%	
68.081	Phytone	1823	0.09%	
68.635	Nepetalactone analogue	1834	0.08%	
70.067	Nepetalactone analogue	1862	0.03%	
70.594	Nepetalic acid isomer	1872	0.04%	
74.011	Unidentified	1941	0.36%	
74.158	Nepetalic acid isomer	1944	0.04%	
76.704	Unidentified	1996	0.02%	
77.040	Unidentified	2003	0.04%	
78.016	Unidentified	2024	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
78.607	Unidentified isomer II	2036	0.04%	
79.092	Unidentified isomer II	2047	0.19%	
82.455	Unidentified	2120	0.03%	
84.134	Unidentified	2157	0.04%	
90.670	Unidentified	2309	0.02%	
91.206	Unidentified	2322	0.03%	
95.059	Unidentified	2416	0.03%	
97.450	Unidentified	2477	0.03%	
101.074	Unidentified isomer III	2571	0.02%	
103.032	Unidentified isomer III	2623	0.02%	
103.254	Unidentified isomer III	2629	0.02%	

Total Identified Compounds **97.1 %**

