



Essential Oil University

GC/MS Report

Item	Lot
Nutmeg EO <i>Myristica fragrans</i>	1F
Date	Analyst
9/30/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Nutmeg EO, meets the expected chemical profile for authentic essential oil of *Myristica fragrans*. 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: Nutmeg EO
Botanical Name: Myristica fragrans
Lot Number: 1F
Production Method: Steam distilled

Sample Type: EO - Single
Country of Origin: Malaysia
Analysis Date: 9/30/2025
Manufacture Date: July 2025

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

+5.76
1.47709
0.88243



Ret. Time	Component	Ret. Idx.	Conc. %	
11.329	Hashishene	918	0.01%	
11.445	Tricyclene	920	0.01%	
11.594	alpha-Thujene	923	0.96%	
12.027	alpha-Pinene	931	25.63%	
12.781	alpha-Fenchene	944	0.04%	
12.874	Camphene	946	0.21%	
13.073	Thuja-2,4(10)-diene	950	0%	
14.155	Sabinene	970	18.82%	
14.249	Unidentified	972	0.02%	
14.458	beta-Pinene	975	18.74%	
14.734	Camphene isomer	980	0.01%	
14.820	Unidentified	982	0.01%	
14.908	para-Menth-3-ene	984	0.02%	
15.048	Myrcene	986	2.94%	
15.715	Unidentified	999	0.01%	
15.942	Pseudolimonene	1002	0.13%	
16.084	alpha-Phellandrene	1004	0.38%	
16.226	delta-3-Carene	1007	0.61%	
16.598	1,4-Cineole	1012	0.05%	
16.737	alpha-Terpinene	1015	1.29%	
16.896	ortho-Cymene	1017	0.01%	
17.218	para-Cymene	1022	2.91%	
17.521	Limonene	1027	5.04%	IFRA
17.618	beta-Phellandrene	1028	1%	
17.691	1,8-Cineole	1029	1.83%	
17.913	cis-beta-Ocimene	1033	0.01%	
18.585	trans-beta-Ocimene	1043	0.01%	
19.359	gamma-Terpinene	1055	1.94%	
20.122	trans-Sabinene hydrate	1067	0.1%	
21.138	Terpinolene	1082	0.76%	
21.464	para-Cymenene	1087	0.03%	
21.907	Unidentified	1094	0.03%	
22.090	Linalool	1097	0.11%	IFRA
22.163	cis-Sabinene hydrate	1098	0.07%	
22.728	Thujol	1106	0.02%	
23.075	Unidentified	1112	0.01%	
23.404	endo-Fenchol	1116	0.01%	
23.759	cis-para-Menth-2-en-1-ol	1121	0.06%	
24.532	Terpin-3-en-1-ol	1133	0.01%	
24.863	trans-Pinocarveol	1138	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
24.986	trans-para-Menth-2-en-1-ol	1139	0.05%	
25.195	trans-Verbenol	1142	0.01%	
25.472	Unidentified	1146	0.01%	
26.411	Isoborneol	1160	0.02%	
27.005	Borneol	1169	0.03%	
27.633	Terpinen-4-ol	1178	4.96%	
28.049	para-Cymen-8-ol	1184	0.01%	
28.614	alpha-Terpineol	1192	0.38%	
28.735	cis-Piperitol	1194	0.01%	
29.570	trans-Piperitol	1206	0.02%	
32.625	Unidentified	1251	0.01%	
34.653	Bornyl acetate	1281	0.05%	
35.016	Safrole	1286	0.72%	
35.447	Terpin-1-en-4-yl acetate	1293	0.01%	
35.561	Unidentified	1294	0.02%	
36.013	Hydrocinnamaldehyde analogue	1301	0.12%	
36.105	Unidentified	1302	0.01%	
37.015	Unidentified	1316	0.01%	
38.784	alpha-Terpinyl acetate	1343	0.09%	
38.992	Citronellyl acetate	1346	0.03%	IFRA
39.086	Eugenol	1348	0.08%	IFRA
40.670	alpha-Copaene	1372	0.17%	
40.854	Geranyl acetate	1375	0.07%	
42.259	Methyleugenol	1396	0.24%	IFRA
43.468	beta-Caryophyllene	1415	3.43%	
44.325	trans-alpha-Bergamotene	1429	0.04%	
45.168	trans-Isoeugenol	1443	0.15%	IFRA
45.702	alpha-Humulene	1451	0.01%	
47.294	Germacrene D	1477	0.01%	
48.198	cis-Methyl isoeugenol	1491	0.05%	
48.755	trans,trans-alpha-Farnesene	1500	0.01%	
48.961	beta-Bisabolene	1504	0.02%	
49.565	delta-Cadinene	1514	0.04%	
49.708	Myristicin	1516	5.01%	
50.412	trans-Cadine-1,4-diene	1528	0.01%	
51.277	Elemicin	1543	0.18%	
53.311	Caryophyllene oxide	1577	0.03%	
54.053	Methoxyeugenol	1590	0.04%	

Total Identified Compounds **99.89 %**



TIC
19,225,211

