



Essential Oil University

GC/MS Report

Item	Lot
Nutmeg EO <i>Myristica fragrans</i>	2L
Date	Analyst
1/14/2025	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, 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:** 2L**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Malaysia**Analysis Date:** 1/14/2025**Manufacture Date:** November 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

+5.68

1.47817

0.88719



Ret. Time	Component	Ret. Idx.	Conc. %	
11.563	Unidentified	918	0.01%	
11.687	Tricyclene	921	0.01%	
11.838	alpha-Thujene	923	0.95%	
12.275	alpha-Pinene	931	23.82%	
13.036	alpha-Fenchene	945	0.04%	
13.131	Camphene	947	0.24%	
14.425	Sabinene	970	17.73%	
14.510	Unidentified	972	0.02%	
14.730	beta-Pinene	976	19.44%	
15.015	alpha-Fenchene isomer	981	0.01%	
15.195	para-Menth-3-ene	984	0.02%	
15.329	Myrcene	987	3.41%	
16.009	Unidentified	999	0.01%	
16.232	Pseudolimonene	1003	0.15%	
16.378	alpha-Phellandrene	1005	0.41%	
16.526	delta-3-Carene	1007	0.84%	
16.889	1,4-Cineole	1013	0.08%	
17.037	alpha-Terpinene	1015	1.3%	
17.196	ortho-Cymene	1017	0.01%	
17.517	para-Cymene	1022	3.09%	
17.820	Limonene	1027	5.8%	IFRA
17.915	beta-Phellandrene	1028	1%	
17.981	1,8-Cineole	1029	2.2%	
18.217	cis-beta-Ocimene	1033	0.01%	
18.896	trans-beta-Ocimene	1044	0.01%	
19.678	gamma-Terpinene	1055	1.91%	
20.443	trans-Sabinene hydrate	1067	0.09%	
21.483	Terpinolene	1083	0.8%	
21.807	para-Cymenene	1088	0.02%	
22.252	Unidentified	1095	0.02%	IFRA
22.426	Linalool	1098	0.09%	
22.498	cis-Sabinene hydrate	1099	0.07%	
23.737	endo-Fenchol	1117	0.01%	
24.111	cis-para-Menth-2-en-1-ol	1122	0.03%	
24.889	Unidentified	1133	0.01%	
25.222	Unidentified	1138	0.01%	
25.344	trans-para-Menth-2-en-1-ol	1140	0.03%	
27.360	Borneol	1169	0.02%	
27.989	Terpinen-4-ol	1178	5.03%	
28.405	para-Cymen-8-ol	1184	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %	
28.973	alpha-Terpineol	1193	0.35%	
29.115	cis-Piperitol	1195	0.01%	
29.939	trans-Piperitol	1207	0.01%	
30.429	Unidentified	1214	0.01%	
32.733	Unidentified	1248	0.01%	
35.032	Bornyl acetate	1282	0.04%	
35.389	Safrole	1287	0.66%	
36.395	Unidentified	1302	0.08%	
39.176	alpha-Terpinyl acetate	1344	0.07%	
39.387	Citronellyl acetate	1347	0.02%	IFRA
39.462	Eugenol	1348	0.1%	IFRA
41.086	alpha-Copaene	1373	0.13%	
41.234	Geranyl acetate	1375	0.07%	
42.636	Methyleugenol	1397	0.08%	IFRA
43.888	beta-Caryophyllene	1417	3.39%	
44.743	trans-alpha-Bergamotene	1430	0.03%	
45.554	trans-Isoeugenol	1443	0.25%	IFRA
47.717	Germacrene D	1478	0.01%	
48.594	trans-Methyl isoeugenol	1492	0.01%	
49.174	Unidentified	1501	0.01%	
49.383	beta-Bisabolene	1505	0.01%	
50.102	Myristicin	1517	5.52%	
51.673	Elemicin	1544	0.13%	
54.446	Methoxyeugenol	1590	0.17%	
108.602	Methoxyeugenol isomer	2809	0.05%	

Total Identified Compounds **99.81 %**

