

Sample Information

Sample Name: Nutmeg

Botanical Name: Myristica fragrans

Lot Number: 13071

Production Method: Steam distilled

Sample Type: EO - Single

Country of Origin: Malaysia

Analysis Date: 11/14/2024

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%	
22.426	Linalool	1098	0.09%	IFRA
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 %**

