



Sample & Analysis Information

Sample Information

Sample Name: Oregano Essential Oil
Botanical Name: Origanum vulgare
Lot Number: 13171
Production Method: Steam distilled

Sample Type: Essential Oil
Country of Origin: Greece
Analysis Date: 9/6/2024
Date of Distillation: September 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

+0.48
1.51763
0.96274

Ret. Time	Component	Ret. Idx.	Conc. %	
9.627	Santene	880	0.01%	
11.539	Tricyclene	922	0.06%	
11.690	alpha-Thujene	924	0.04%	
12.088	alpha-Pinene	932	0.72%	
12.975	Camphene	948	0.3%	
14.226	Sabinene	971	0.08%	
14.523	beta-Pinene	977	0.35%	
15.151	Myrcene	988	0.16%	
15.362	Unidentified	992	0.02%	
16.201	alpha-Phellandrene	1006	0.03%	
16.341	delta-3-Carene	1008	0.03%	
16.853	alpha-Terpinene	1016	0.3%	
17.010	ortho-Cymene	1019	0.03%	
17.346	para-Cymene	1024	9.37%	
17.624	Limonene	1028	0.16%	IFRA
17.740	beta-Phellandrene	1030	0.04%	
17.805	1,8-Cineole	1031	1.23%	
19.478	gamma-Terpinene	1057	0.57%	
20.251	trans-Sabinene hydrate	1069	0.1%	
21.268	Terpinolene	1084	0.08%	
22.219	Linalool	1099	0.05%	IFRA
22.304	cis-Sabinene hydrate	1100	0.14%	
23.907	Unidentified	1124	0.01%	
25.131	Unidentified	1141	0.01%	
25.454	Camphor	1146	0.27%	
27.152	Borneol	1171	0.03%	
27.757	Terpinen-4-ol	1180	0.52%	
28.786	alpha-Terpineol	1195	0.07%	
31.096	Thymol methyl ether	1229	0.04%	
32.514	Linalyl acetate	1249	0.03%	
34.615	Thymol analogue	1280	0.01%	
34.943	Bornyl acetate	1285	0.04%	
35.258	Thymol	1290	17.08%	
35.930	Carvacrol	1300	67.51%	
43.610	beta-Caryophyllene	1418	0.34%	
44.789	Aromadendrene	1437	0.02%	
45.850	alpha-Humulene	1454	0.09%	
48.056	Viridiflorene	1489	0.02%	
48.328	Bicyclogermacrene	1493	0.02%	
53.452	Caryophyllene oxide	1580	0.02%	

Ret. Time	Component	Ret. Idx.	Conc. %
58.490	Unidentified	1668	0.01%

Total Identified Compounds **99.96 %**

