



Sample Information

Sample Name: Dalmation Sage**Botanical Name:** Salvia Officinalis**Lot Number:** 13093**Production Method:** Steam Distilled**Sample Type:** Essential Oils**Country of Origin:** Greece**Analysis Date:** 10/9/2024**Date of Distillation:** October 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

+4.60

1.46370

0.92041

Ret. Time	Component	Ret. Idx.	Conc. %	
4.210	3-Methylbutanal	672	0.06%	
4.328	2-Methylbutanal	677	0.02%	
8.917	cis-Salvene	843	0.34%	
9.293	trans-Salvene	852	0.06%	
12.176	Hashishene	917	0.05%	
12.301	Tricyclene	919	0.15%	
12.448	alpha-Thujene	921	0.08%	
12.875	alpha-Pinene	929	3.28%	
13.704	alpha-Fenchene	943	0.04%	
13.809	Camphene	945	4.84%	
14.001	Thuja-2,4(10)diene	949	0.01%	
15.093	Sabinene	968	0.03%	
15.409	beta-Pinene	973	1.36%	
16.030	Myrcene	984	1.04%	
16.472	3-Octanol	992	0.02%	
17.125	alpha-Phellandrene	1003	0.09%	
17.797	alpha-Terpinene	1013	0.3%	
18.283	para-Cymene	1020	1.11%	
18.476	Unidentified	1023	0.01%	
18.599	Limonene	1025	2.39%	IFRA
18.725	beta-Phellandrene	1027	0.11%	
18.811	1,8-Cineole	1028	9.57%	
18.983	cis-beta-Ocimene	1031	0.08%	
19.685	trans-beta-Ocimene	1041	0.02%	
20.491	gamma-Terpinene	1054	0.41%	
21.309	trans-Sabinene hydrate	1066	0.05%	
22.325	Terpinolene	1081	0.24%	
22.400	trans-Linalool oxide (furanoid)	1082	0.01%	
22.570	Fenchone	1085	0.01%	
22.635	para-Cymenene	1086	0.1%	
23.365	Linalool	1097	0.48%	IFRA
23.884	alpha-Thujone	1104	32.61%	IFRA
24.577	beta-Thujone	1114	4.99%	IFRA
24.834	6-Camphenone	1118	0.06%	
25.165	alpha-Campholenal	1123	0.03%	
25.971	Isothujol	1134	0.06%	
26.092	trans-Sabinol	1136	0.12%	
26.323	Unidentified	1139	0.02%	
26.656	Camphor	1144	17.68%	
26.925	Neothujol	1148	0.07%	

Ret. Time	Component	Ret. Idx.	Conc. %	
27.154	Camphene hydrate	1151	0.05%	
27.515	trans-Pinocamphone	1156	0.03%	
27.729	Isoborneol	1159	0.04%	
28.083	Thujol	1164	0.31%	
28.191	delta-Terpineol	1166	0.03%	
28.325	Borneol	1168	2.31%	
28.759	Unidentified	1174	0.03%	
28.912	Terpinen-4-ol	1176	0.49%	
29.310	para-Cymen-8-ol	1182	0.08%	
29.438	Unidentified	1184	0.02%	
29.707	Unidentified	1188	0.03%	
29.909	alpha-Terpineol	1191	0.18%	
30.269	Unidentified	1196	0.09%	
30.445	Unidentified	1198	0.02%	
31.523	trans-Carveol	1214	0.05%	
32.696	cis-3-Hexenyl isovalerate	1231	0.02%	IFRA
33.145	Hexyl-3-methylbutanoate	1237	0.01%	
33.316	Hex-(2E)-enyl-3-methylbutanoate	1240	0.03%	
33.607	Carvotanacetone	1244	0.02%	
33.643	Geraniol	1245	0.02%	IFRA
34.832	Unidentified	1262	0.03%	
34.998	Unidentified	1264	0.03%	
35.761	Carvacrol	1275	0.02%	
36.044	Bornyl acetate	1280	2.68%	
36.204	Isobornyl acetate	1282	0.05%	
36.299	trans-Sabinyol acetate	1283	0.33%	
36.444	Thujyl acetate	1285	0.15%	
36.835	Terpin-1-en-4-yl acetate	1291	0.01%	
36.897	Thymol	1292	0.06%	
37.206	Unidentified	1296	0.04%	
39.237	trans-Carvyl acetate	1327	0.03%	IFRA
39.910	Unidentified	1337	0.02%	
40.155	Unidentified	1341	0.01%	
40.238	Unidentified	1342	0.08%	
40.435	Eugenol	1345	0%	
40.934	Unidentified	1353	0.02%	
42.135	alpha-Copaene	1371	0.03%	
42.224	Geranyl acetate	1372	0.01%	
44.004	cis-beta-Caryophyllene	1399	0.04%	
44.965	trans-beta-Caryophyllene	1414	3.05%	

Ret. Time	Component	Ret. Idx.	Conc. %	
45.471	beta-Caryophyllene isomer	1423	0.02%	
45.731	Unidentified	1427	0.21%	
46.136	Aromadendrene	1433	0.07%	
46.244	Unidentified	1435	0.03%	
46.730	Unidentified	1443	0.33%	
47.221	alpha-Humulene	1450	3.28%	
47.487	Alloaromadendrene	1455	0.17%	
48.414	gamma-Muurolene	1469	0.01%	
49.280	beta-Selinene	1483	0.05%	
49.412	Viridiflorene	1485	0.24%	
49.730	alpha-Selinene	1490	0.02%	
51.054	delta-Cadinene	1512	0.03%	
52.155	Unidentified	1530	0.02%	
54.855	Caryophyllene oxide	1576	0.14%	
55.588	Viridiflorol	1588	2.02%	
55.842	Unidentified	1592	0.08%	
56.480	Humulene epoxide II	1603	0.31%	
57.767	Unidentified	1626	0.09%	
58.012	Caryophylla-4(12),8(13)-dien-5-beta-ol	1630	0.02%	
59.054	14-Hydroxy-9-epi-(Z)-Caryophyllene isomer	1649	0.04%	
59.871	14-Hydroxy-9-epi-(E)-Caryophyllene isomer	1663	0.01%	
65.531	Unidentified	1766	0.03%	
66.919	Unidentified	1792	0.02%	
72.705	Isopimara-9(11),15-diene	1905	0.03%	
79.370	Manool	2043	0.21%	

Total Identified Compounds **98.77 %**

