

Sample Information

Sample Name: Cistus (Labdanum) EO
Botanical Name: Cistus ladanifer **Lot**
Number: SPX15-XK
Production Method: Steam distilled

Sample Type: EO - Single
Country of Origin: Spain
Analysis Date: 4/15/2024
Date of Distillation: April 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

ANALYSIS

Optical Rotation @20°C
Refractive Index @20°C
Specific Gravity @20°C

Physical Data

METHOD	RESULTS
USP[781]	-6.64
USP[831]	1.47486
USP[841]	0.90144

Ret. Time	Component	Ret. Idx.	
3.828	Unidentified	666	0.01%
4.985	2,5,5-Trimethyl	720	0.02%
5.495	1,2,3-Trimethyl-	743	0.16%
5.595	Cyclopentene isomer	748	0.02%
5.850	Toluene	760	0.08%

IFRA

			Conc. %	
7.771	Unidentified	827	0.01%	
7.850	6,6-Dimethylhepta-2,4-diene isomer	830	0.03%	
8.534	Unidentified	847	0.05%	
8.675	6,6-Dimethylhepta-2,4-diene	851	0.31%	
9.638	Unidentified	876	0.08%	
10.064	Styrene	888	0.02%	
10.861	Unidentified	906	0.08%	
11.562	Tricyclene	919	1.28%	
11.710	alpha-Thujene	921	0.25%	
11.882	Unidentified	924	0.09%	
12.170	alpha-Pinene	930	39.23%	
12.437	beta-Fenchene	935	0.03%	
12.908	alpha-Fenchene	943	0.15%	
13.013	Camphene	945	6.69%	
13.104	2-Octanone	947	0.03%	
13.199	Thuja-2,4(10)diene	948	0.67%	
13.641	Benzaldehyde	956	0.02%	IFRA
13.788	6-Methyl hept-5-en-2-one isomer	959	0.02%	
14.248	Sabinene	967	0.07%	
14.547	beta-Pinene	973	1.27%	
14.875	6-Methyl hept-5-en-2-one	979	0.04%	
15.175	Myrcene	984	0.03%	
15.237	Mentatriene analogue	985	0.17%	
15.724	Unidentified	994	0.02%	
16.140	Mentatriene analogue	1002	0.22%	
16.220	alpha-Phellandrene	1003	0.18%	
16.377	Cymene analogue	1005	0.08%	
16.874	alpha-Terpinene	1013	0.62%	
17.036	ortho-Cymene	1015	0.05%	
17.367	para-Cymene	1020	5.77%	
17.656	Limonene	1025	2.48%	IFRA
17.755	beta-Phellandrene	1026	0.2%	
17.831	1,8-Cineole	1028	0.54%	
18.003	2,2,6-Trimethyl cyclohexanone	1030	1.88%	
18.738	Unidentified	1042	0.04%	

Ret. Time	Component	Ret. Idx.	Conc. %	
18.975	Unidentified	1045	0.1%	
19.509	gamma-Terpinene	1053	2.22%	
19.942	Acetophenone	1060	0.11%	
20.404	Pinol	1067	0.19%	
20.536	Gardenia ether	1069	0.06%	
20.785	Unidentified	1073	0.04%	
21.293	Terpinolene	1081	0.34%	
21.400	Unidentified	1082	0.02%	
21.505	Fenchone	1084	0.02%	
21.612	para-Cymenene	1086	1.15%	
22.241	Linalool + Unidentified	1095	0.3%	
22.442	Unidentified	1098	0.08%	
22.598	Nonanal	1101	0.07%	
22.931	Unidentified + cis-Rose oxide	1106	0.24%	
23.484	beta-Thujone	1114	0.03%	IFRA
23.575	endo-Fenchol	1115	0.03%	
24.087	alpha-Campholenal	1122	0.52%	
24.324	trans-Sabinol	1126	0.05%	
24.842	Non-3-en-2-one	1133	0.32%	
25.044	trans-Pinocarveol	1136	2.26%	
25.351	cis-Tagetone	1141	0.06%	
25.467	Camphor	1142	0.24%	
25.699	alpha-Phellandrene-8-ol	1146	0.2%	
26.161	Sabina ketone	1152	0.05%	
26.386	trans-Pinocamphone	1156	0.32%	
26.506	Pinocarvone	1157	0.21%	
26.885	Isoborneol	1163	0.12%	
27.176	Borneol	1167	1.26%	
27.462	Isopinocamphone	1171	0.58%	
27.787	Terpinen-4-ol	1176	2.37%	
28.208	para-Cymen-8-ol	1182	0.14%	
28.793	Myrtenal	1191	1.11%	
28.986	cis-Dihydrocarvone	1193	0.03%	
29.304	Unidentified	1198	0.02%	
29.571	Verbenone	1202	0.21%	
29.690	Unidentified	1204	0.05%	
30.335	Unidentified	1213	0.02%	
30.396	trans-Carveol	1214	0.19%	
30.973	Unidentified	1222	0.1%	
31.065	Bornyl formate + Unidentified	1224	0.09%	

Ret. Time	Component	Ret. Idx.	Conc. %	
31.213	cis-Ocimenone	1226	0.09%	
31.310	cis-Carveol	1227	0.03%	
31.725	Unidentified	1233	0.26%	
31.990	Cuminal	1237	0.03%	IFRA
32.093	Carvone	1239	0.1%	IFRA
32.950	Unidentified	1251	0.23%	
33.290	Unidentified	1256	0.02%	
34.387	Phellandral	1273	0.04%	
34.869	Bornyl acetate	1280	11.26%	
35.005	Isobornyl acetate	1282	0.15%	
35.316	Unidentified	1286	0.05%	
35.581	trans-Pinocarvyl acetate	1290	0.06%	
35.749	Carvacrol	1293	0.12%	
36.188	Unidentified	1299	0.03%	
36.484	Unidentified	1303	0.08%	
37.402	Myrtenyl acetate	1317	0.22%	
37.646	Unidentified	1321	0.05%	
38.032	trans-Carveyl acetate	1327	0.11%	
38.999	Unidentified	1342	0.09%	
40.434	Cyclosativene + Isoledene	1364	0.48%	
40.858	alpha-Copaene	1370	0.46%	
41.119	Unidentified	1374	0.05%	
41.870	alpha-Duprezianene	1386	0.07%	
42.061	Unidentified	1389	0.04%	
42.868	beta-Maaliene	1401	0.05%	
43.647	beta-Caryophyllene	1413	0.19%	
44.928	6,9-Guanidiene	1434	0.17%	
45.065	Unidentified	1436	0.03%	
46.167	Alloaromadendrene	1454	0.57%	
46.932	10-beta-H-Cadina-1(6),4-diene	1466	0.12%	
47.107	trans-Cadina-1(6),4-diene	1469	0.08%	
47.950	alpha-Bulnesene	1482	0.26%	
48.103	Viridiflorene	1485	1.51%	
48.571	alpha-Muurolene	1492	0.09%	
49.449	Unidentified	1507	0.1%	
49.753	delta-Cadinene	1512	0.54%	
49.947	trans-Calamenene	1515	0.11%	
50.040	Zonarene	1517	0.03%	
50.599	trans-Cadine-1,4-diene	1526	0.04%	
51.103	alpha-Calacorene	1535	0.18%	

Ret. Time	Component	Ret. Idx.	Conc. %
52.830	Palustrol	1564	0.14%
53.195	Spathulenol	1570	0.07%
53.511	Caryophyllene oxide	1575	0.06%
54.236	Viridiflorol	1587	1.74%
54.374	Guaiol	1590	0.19%
54.826	Ledol	1597	0.54%
55.065	Copaborneol	1601	0.23%
56.150	1-Epicubenol	1621	0.03%
56.768	Unidentified	1632	0.02%
57.668	Eudesmol analogue	1648	0.06%
58.334	Unidentified	1660	0.07%
58.662	Cadalene	1665	0.03%
73.579	Unidentified	1952	0.08%

Total Identified Compounds **97.32 %**

