



GC/MS Report

GC2

Item	Lot
98401-51	13559
<i>Juniperus communis</i> Juniper Berry EO	
Date	Analyst
9/17/2025	K. S

Sample Information

Sample Name: Juniper	Sample Type: EO - Single
Botanical Name: Juniperus communis	Country of Origin: Serbia
Lot Number: 13559	Analysis Date: 9/17/2025
Production Method: Steam distilled	Manufacture Date: September 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra	Column Type: ZB-5
Injection Type: Split	Injection Volume: 0.1 µL
Split Ratio: 24.4	Temperature Program: 2C/min

Physical Data

ANALYSIS	METHOD	RESULTS
Optical Rotation @20°C	USP[781]	-4.16
Refractive Index @20°C	USP[831]	1.47418
Specific Gravity @20°C	USP[841]	0.87090

Ret. Time	Component	Ret. Idx.	Conc. %	
11.444	2,6-Dimethyl-4-octene	904	0.02%	
11.996	Hashishene	913	0.01%	
12.118	Tricyclene	916	0.14%	
12.273	alpha-Thujene	918	0.26%	
12.712	alpha-Pinene	926	43.97%	
13.504	alpha-Fenchene	940	0.04%	
13.602	Camphene	942	0.42%	
13.804	Thuja-2,4(10)diene	945	0.02%	
14.890	Sabinene	964	15.13%	
15.196	beta-Pinene	970	8.22%	
15.509	Camphene isomer	975	0.02%	
15.685	3-para-Menthene	978	0.01%	
15.818	Myrcene	981	3.33%	
15.885	Unidentified	982	0.05%	
16.744	Pseudolimonene	997	0.19%	
16.905	alpha-Phellandrene	1000	0.02%	
17.040	delta-3-Carene	1002	0.13%	
17.571	alpha-Terpinene	1010	0.07%	
18.038	para-Cymene	1017	0.64%	
18.349	Limonene	1021	9.38%	IFRA
18.454	beta-Phellandrene	1023	0.01%	
18.555	1,8-Cineole	1025	0%	
19.433	trans-beta-Ocimene	1038	0.01%	
20.231	gamma-Terpinene	1050	0.91%	
22.050	Terpinolene	1077	0.62%	
22.270	Fenchone	1080	0.01%	
22.363	para-Cymenene	1082	0.02%	
22.983	alpha-Pinene oxide	1091	0.05%	
23.670	Unidentified	1101	0.05%	
25.293	cis-Limonene oxide	1124	0.01%	
25.510	Terpin-3-en-1-ol	1128	0.03%	
25.838	trans-Pinocarveol	1132	0.04%	
25.983	Epoxyterpinolene	1134	0.02%	
26.159	trans-Verbenol	1137	0.04%	
27.993	Borneol	1163	0.02%	
28.603	Terpinen-4-ol	1172	4.94%	
29.018	para-Cymen-8-ol	1178	0.03%	
29.599	alpha-Terpineol	1186	0.97%	
31.752	Citronellol	1217	0.01%	IFRA
33.674	Unidentified	1245	0.04%	

Ret. Time	Component	Ret. Idx.	Conc. %	
35.710	Bornyl acetate	1275	0.14%	
35.865	trans-Anethole	1277	0.02%	
36.591	Unidentified	1288	0.01%	
39.845	alpha-Terpinyl acetate	1336	0.4%	
40.120	Eugenol	1340	0.02%	IFRA
41.786	alpha-Copaene	1366	0.02%	
42.575	Unidentified	1378	0.02%	
42.674	beta-Elemene	1379	0.02%	
44.342	alpha-Cedrene	1405	0.19%	IFRA
44.606	beta-Caryophyllene	1409	3%	
44.895	beta-Cedrene	1413	0.03%	IFRA
45.223	gamma-Elemene	1419	0.03%	
45.577	cis-Thujopsene	1424	0.04%	
46.476	Humulen-(v1)	1439	0.08%	
46.860	alpha-Humulene	1445	2.4%	
47.129	Alloaromodendrene	1449	0.01%	
47.880	cis-Murrola-4(14),5-diene	1461	0.02%	
48.063	gamma-Murolene	1464	0.03%	
48.447	Germacrene D	1470	1.01%	
49.531	alpha-Murolene	1487	0.03%	
50.114	Unidentified	1496	0.02%	
50.290	alpha-Alaskene	1499	0.05%	
50.406	gamma-Cadinene	1501	0.07%	
50.713	delta-Cadinene	1506	1.21%	
50.902	cis-Calamenene	1509	0.02%	
52.486	Elemol	1536	0.01%	
53.136	Germacrene B	1547	0.03%	
54.491	Caryophyllene oxide	1570	0.09%	
55.320	allo-Cedrol	1584	0.06%	
56.056	Cedrol	1596	1.02%	
57.769	Unidentified	1626	0.04%	
80.522	Abietadiene	2068	0.01%	

Total Identified Compounds 99.82 %

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26,917,003

