



Sample & Analysis Information

Sample Information

Sample Name: Cedarwood Virginian Essential Oil**Botanical Name:** Juniperus virginiana**Lot Number:** 13369**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 6/12/2025**Manufacture Date:** June 2025

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 μ L**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

-29.68

1.50477

0.95243

Ret. Time	Component	Ret. Idx.	Conc. %	
12.749	alpha-Pinene	927	0.07%	
18.428	Limonene	1023	0.01%	IFRA
26.378	Camphor	1140	0.01%	
28.700	Terpinen-4-ol	1173	0.07%	
29.708	alpha-Terpineol	1188	0.02%	
32.675	Thymol methyl ether	1231	0.04%	
36.685	Thymol	1289	0.01%	
36.772	Unidentified	1290	0.04%	
39.571	Unidentified	1332	0.01%	
39.952	alpha-Terpinyl acetate	1338	0.01%	
40.255	Unidentified	1342	0.03%	
40.463	Unidentified	1346	0.01%	
41.101	Unidentified	1355	0.01%	
41.208	Unidentified	1357	0.01%	
41.468	Unidentified	1361	0.01%	
41.665	beta-Patchoulene	1364	0.01%	
41.920	alpha-Copaene	1368	0.01%	
41.981	Unidentified	1369	0.05%	
42.322	Cedrene isomer	1374	0.69%	
42.489	2-epi-alpha-Funebrene	1376	0.08%	
42.606	alpha-Duprezianene	1378	0.78%	
42.793	beta-Elemene	1381	0.47%	
43.044	Isolongifolene	1385	0.22%	
43.238	Unidentified	1388	0.02%	
43.513	beta-Longipinene	1392	0.12%	
43.637	alpha-Funebrene	1394	0.5%	
43.850	Funebrene isomer	1397	0.2%	
44.072	Unidentified	1400	0.05%	
44.186	Unidentified	1402	0.04%	
44.315	Unidentified	1404	0.01%	
44.612	alpha-Cedrene	1409	25.96%	IFRA
44.740	beta-Caryophyllene	1411	1.26%	
44.975	Unidentified	1415	0.65%	
45.049	beta-Cedrene	1416	5.84%	IFRA
45.155	Unidentified	1417	0.01%	
45.270	Unidentified	1419	0.01%	
45.465	(+)-epi-Bicyclosesquiphellandrene	1422	0.07%	
45.779	cis-Thujopsene	1427	17.3%	
45.855	Isobazzanene	1429	0.13%	
46.012	Unidentified	1431	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %	
46.144	Unidentified	1433	0.01%	
46.388	Unidentified	1437	0.06%	
46.593	beta-Barbatene	1440	0.13%	
46.716	Prezizaene	1442	0.42%	
46.835	Unidentified	1444	0.06%	
46.968	alpha-Humulene	1446	0.09%	
47.057	Unidentified	1448	0.08%	
47.228	Valerna-4,7(11)-diene	1450	0.16%	
47.482	alpha-Acoradiene	1455	0.39%	
47.636	beta-Acoradiene	1457	0.56%	
47.823	Unidentified	1460	0.06%	
48.030	cis-Cadina-1(6),4-diene	1463	0.13%	
48.089	Selina-4,11-diene	1464	0.45%	
48.168	cis-Muurolo-4(14),5-diene	1465	0.29%	
48.354	gamma-Curcumene	1468	0.34%	
48.424	alpha-Muuroloene	1470	0.15%	
48.568	beta-Chamigrene	1472	1.25%	
48.688	Unidentified	1474	0.05%	
48.782	Unidentified	1475	0.03%	
48.934	Unidentified	1478	0.04%	
49.053	beta-Selinene	1480	0.32%	
49.264	trans-Murrola-4(14),5-diene	1483	0.09%	
49.405	beta-Alaskene	1485	0.3%	
49.490	alpha-Selinene	1486	0.29%	
49.650	alpha-Muuroloene	1489	0.32%	
49.738	Himachalene isomer	1490	0.14%	
49.940	beta-Himachalene	1494	1.44%	
49.990	Pseudowiddrene	1494	0.94%	
50.113	alpha-Chamigrene	1496	0.72%	
50.235	Cuparene	1498	1.64%	
50.401	alpha-Alaskene	1501	0.93%	
50.507	gamma-Cadinene	1503	0.17%	
50.690	Unidentified	1506	0.03%	
50.813	delta-Cadinene	1508	0.76%	
51.077	Unidentified	1512	0.21%	
51.130	beta-Sesquiphellandrene	1513	0.08%	
51.330	cis-gamma-Bisabolene	1517	0.15%	
51.553	cis-Calamenene	1520	0.01%	
51.670	trans-Cadina-1,4-diene	1522	0.02%	
51.796	gamma-Cuprenene	1524	0.92%	

Ret. Time	Component	Ret. Idx.	Conc. %	
51.920	alpha-Cadinene	1527	0.01%	
52.176	Unidentified	1531	0.18%	
52.366	Unidentified	1534	0.01%	
52.556	delta-Cuprenene	1537	0.16%	
52.605	Unidentified	1538	0.14%	
52.997	Unidentified	1545	0.02%	
53.240	Unidentified	1549	0%	
53.365	Unidentified	1551	0.1%	
53.669	Unidentified	1556	0.02%	
53.795	Unidentified	1558	0.02%	
53.995	Unidentified	1561	0.01%	
54.234	Unidentified	1565	0.16%	
54.360	Unidentified	1567	0.07%	
54.645	Unidentified	1572	0.03%	
54.694	Unidentified	1573	0.04%	
54.745	Unidentified	1574	0.03%	
54.921	Unidentified	1577	0.03%	
55.145	Unidentified	1581	0.03%	
55.318	Unidentified	1584	0.05%	
55.442	epi-Globulol	1586	0.57%	
55.654	Unidentified	1589	0.12%	
55.873	allo-Cedrol	1593	0.06%	
56.155	Widdrol	1598	3.03%	
56.278	Cedrol	1600	18.29%	
56.695	Unidentified	1607	0.22%	
56.748	Unidentified	1608	0.26%	
56.985	Epicedrol	1612	0.83%	
57.257	1,10-di-epi-Cubenol	1617	0.19%	
57.363	2-epi-alpha-Cedren-3-one	1619	0.13%	
57.490	gamma-Eudesmol	1621	0.41%	
57.525	Unidentified	1622	0.28%	
57.787	alpha-Acorenol	1626	0.24%	
58.078	Unidentified	1631	0.5%	
58.125	epi-alpha-Muurolol	1632	0.26%	
58.371	Unidentified	1637	0.18%	
58.830	Unidentified	1645	0.71%	
59.244	Unidentified	1652	0.27%	
59.318	Unidentified	1653	0.09%	
59.409	Unidentified	1655	0.08%	
59.512	Unidentified	1657	0.08%	

Ret. Time	Component	Ret. Idx.	Conc. %	
59.671	Unidentified	1659	0.19%	
59.968	Junicedranone	1665	0.11%	
60.220	Isocedranol	1669	0.11%	
60.487	alpha-Bisabolol	1674	0.49%	IFRA
60.649	Khusian-2-ol	1677	0.16%	
60.792	Unidentified	1679	0.07%	
60.904	Unidentified	1681	0.12%	
60.998	Cedr-8-en-13-ol	1683	0.1%	
61.168	Unidentified	1686	0.09%	
61.367	Unidentified	1689	0.16%	
61.702	Unidentified	1695	0.21%	
62.035	Thujopsenal	1701	0.15%	
62.161	Unidentified	1704	0.07%	
62.535	Unidentified	1711	0.07%	
63.064	Unidentified	1720	0.03%	
63.778	Unidentified	1734	0.05%	
63.958	Unidentified	1737	0.04%	
64.084	Unidentified	1739	0.03%	
64.206	Unidentified	1742	0.01%	
64.495	Cuparenal	1747	0.01%	
64.693	Cedryl acetate	1751	0.05%	
64.855	Benzyl benzoate	1754	0.05%	IFRA
65.243	Unidentified	1761	0.06%	
65.527	Unidentified	1766	0.05%	
65.580	Unidentified	1767	0.03%	
66.156	Unidentified	1778	0.02%	
66.316	Unidentified	1781	0.11%	
66.409	Unidentified	1783	0.08%	
66.578	Unidentified	1786	0.06%	
66.736	Nootkatone	1789	0.09%	IFRA
66.886	Unidentified	1791	0.05%	
67.144	Unidentified	1796	0.01%	
67.351	Unidentified	1800	0.02%	
67.774	Unidentified	1808	0.01%	
68.028	Unidentified	1813	0.02%	
69.270	Unidentified	1837	0%	
74.654	Unidentified	1945	0.01%	
74.941	Pimaradiene	1950	0.01%	
75.163	Unidentified	1955	0.01%	
79.133	Abietatriene	2038	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %
80.630	Abietadiene	2070	0.03%

Total Identified Compounds **93.03 %**

TIC

16,762,816

