



Essential Oil University

GC/MS Report

Item	Lot
Cedarwood (Rectified) EO virginiana <i>Juniperus virginiana</i>	8BG
Date	Analyst
1/21/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Cedarwood (Rectified) EO virginiana, meets the expected chemical profile for authentic essential oil of *Juniperus virginiana*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Cedarwood (Rectified) EO
virginiana**Botanical Name:** Juniperus virginiana**Lot Number:** 8BG**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 1/21/2025**Manufacture Date:** May 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

-30.76

1.50478

0.95205



Ret. Time	Component	Ret. Idx.	Conc. %	
12.315	alpha-Pinene	923	0.05%	
17.910	Limonene	1019	0.01%	IFRA
28.083	Terpinen-4-ol	1169	0.01%	
28.638	Terpineol isomer	1177	0%	
29.085	alpha-Terpineol	1184	0.02%	
29.885	Verbenone	1195	0.01%	
32.059	Thymol methyl ether	1227	0.06%	
36.103	Unidentified	1286	0.03%	
36.426	Unidentified	1290	0%	
39.281	alpha-Terpinyl acetate	1333	0.02%	
39.565	Unidentified	1338	0.02%	
40.375	Unidentified	1350	0.01%	
40.764	Unidentified	1356	0.01%	
41.280	alpha-Copaene + Cedrene isomer	1364	0.06%	
41.612	2-epi-alpha-Funebrene	1369	0.64%	
41.773	Funebrene isomer	1371	0.07%	
41.895	alpha-Duprezianene	1373	0.61%	
41.993	7-epi-Sesquithujene	1374	0.05%	
42.105	beta-Elemene	1376	0.73%	
42.315	Isolongifolene	1379	0.18%	
42.809	beta-Longipinene	1387	0.07%	
42.912	alpha-Funebrene	1388	0.48%	
43.132	alpha-Chamipinene	1392	0.18%	
43.346	Longifolene	1395	0.04%	IFRA
43.477	Acora-3,7(14)-diene	1397	0.02%	
43.883	alpha-Cedrene	1403	24.66%	IFRA
44.022	beta-Caryophyllene	1405	1.42%	
44.323	beta-Duprezianene + beta-Cedrene	1410	5.98%	
44.452	Unidentified	1412	0.16%	
44.545	Unidentified	1414	0.04%	
44.710	beta-Copaene	1416	0.04%	
44.754	(+)-epi-Bicyclosesquiphellandrene	1417	0.08%	
45.051	cis-Thujopsene	1422	19.13%	
45.138	Isobazzanene	1423	0.02%	
45.410	Unidentified	1428	0%	
45.560	Unidentified	1430	0.01%	
45.684	Unidentified	1432	0.04%	
45.880	beta-Barbatene	1435	0.1%	
45.940	alpha-Himachalene	1436	0.11%	
45.983	Prezizaene	1437	0.24%	



Ret. Time	Component	Ret. Idx.	Conc. %	
46.097	trans-beta-Farnesene	1439	0.14%	
46.248	alpha-Humulene	1441	0.14%	
46.488	Unidentified	1445	0.16%	
46.766	alpha-Acoradiene	1449	0.4%	
46.921	beta-Acoradiene	1452	0.5%	
47.103	Dauca-5,8-diene	1455	0.05%	
47.361	10s,11s-Himachala-3(12),4-diene + Selina-4,11-diene	1459	0.47%	
47.458	gamma-Murolene	1460	0.25%	
47.644	gamma-Curcumene + alpha-Amorphene	1463	0.43%	
47.834	beta-Chamigrene	1466	1.27%	
47.945	Unidentified	1468	0.01%	
48.055	Unidentified	1470	0.01%	
48.328	beta-Selinene	1474	0.37%	
48.547	trans-Murrola-4(14),5-diene	1478	0.09%	
48.688	beta-Alaskene	1480	0.27%	
48.773	alpha-Selinene	1481	0.31%	
48.938	alpha-Murolene	1484	0.37%	
49.010	Himachalene isomer	1485	0.21%	
49.206	beta-Himachalene + Pseudowiddrene	1488	2.01%	
49.380	alpha-Chamigrene	1491	0.64%	
49.507	Cuparene	1493	1.65%	
49.684	alpha-Alaskene	1496	1.08%	
49.802	gamma-Cadinene	1498	0.17%	
50.106	delta-Cadinene	1503	0.87%	
50.323	Unidentified + beta-Sesquiphellandrene	1506	0.32%	
50.619	cis-gamma-Bisabolene	1511	0.18%	
50.836	cis-Calamenene	1515	0.02%	
50.985	trans-Cadina-1,4-diene	1517	0.04%	
51.059	gamma-Cuprenene	1519	0.67%	
51.206	alpha-Murolene	1521	0.07%	
51.458	beta-Calacorene	1525	0.17%	
51.807	delta-Cuprenene	1531	0.13%	
51.880	Unidentified	1532	0.14%	
52.274	Unidentified	1539	0.02%	
52.645	trans-Nerolidol	1545	0.12%	
52.795	Unidentified	1548	0.01%	
52.965	Unidentified	1551	0.02%	
53.059	Unidentified	1552	0.02%	
53.252	Unidentified	1556	0.02%	
53.489	Caryophyllene alcohol	1560	0.12%	



Ret. Time	Component	Ret. Idx.	Conc. %	
53.585	Unidentified	1561	0.07%	
53.917	Unidentified	1567	0.09%	
54.196	Gleenol	1571	0.03%	
54.325	Unidentified	1574	0.02%	
54.697	allo-Cedrol	1580	0.62%	
54.922	Unidentified	1584	0.08%	
55.035	Unidentified	1585	0.04%	
55.145	Unidentified	1587	0.05%	
55.410	Widdrol	1592	0.9%	
55.527	Cedrol	1594	21.81%	
55.800	Cubenol isomer	1598	0.09%	
55.970	Unidentified	1601	0.14%	
56.008	Unidentified	1602	0.2%	
56.228	Epicedrol	1606	0.67%	
56.519	Epicubenol	1611	0.18%	
56.623	1-Epicubenol	1613	0.1%	
56.782	Eudesmol analogue + 2-epi-alpha-Cedren-3-one	1616	0.59%	
57.046	alpha-Acorenol	1620	0.25%	
57.327	Unidentified	1625	0.4%	
57.413	epi-alpha-Cadinol	1627	0.25%	
57.591	delta-Cadinol	1630	0.23%	
58.063	Unidentified	1638	0.81%	
58.218	Unidentified	1641	0.14%	
58.508	Cedr-8-en-15-ol	1646	0.21%	
58.660	14-hydroxy-cis-Caryophyllene	1649	0.18%	
58.767	1,7-diepi-alpha-Cedrenal	1651	0.1%	
58.895	epi-beta-Bisabolol	1653	0.1%	
58.963	beta-Bisabolol	1654	0.11%	
59.196	Junicedranone	1658	0.08%	
59.499	Unidentified	1664	0.1%	
59.644	Unidentified	1666	0.13%	
59.750	alpha-Bisabolol	1668	0.27%	IFRA
59.884	Khusian-2-ol	1671	0.12%	
60.035	Unidentified	1673	0.04%	
60.136	Unidentified	1675	0.08%	
60.247	Cedr-8-en-13-ol	1677	0.07%	
60.414	Unidentified	1680	0.08%	
60.586	Junicedranol	1683	0.06%	
60.635	Unidentified	1684	0.03%	
60.789	Unidentified	1687	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
60.937	14-Hydroxy-9-epi-(Z)-Caryophyllene	1689	0.16%	
61.270	Thujopsenal	1695	0.1%	
61.391	Unidentified	1697	0.05%	
61.784	Unidentified	1704	0.04%	
62.092	Unidentified	1710	0.01%	
62.343	Unidentified	1715	0.01%	
62.765	Unidentified	1723	0.02%	
63.030	Unidentified	1728	0.03%	
63.194	Unidentified	1731	0.03%	
63.346	beta-Acoradienol	1733	0.02%	
63.460	Unidentified	1736	0.01%	
63.724	Cuparenal	1741	0.01%	
63.932	Cedryl acetate	1744	0.12%	
64.108	Unidentified	1748	0.01%	
64.211	Unidentified	1750	0.01%	
64.483	Unidentified	1755	0.03%	
64.776	Unidentified	1760	0.03%	
64.835	Unidentified	1761	0.02%	
64.945	Unidentified	1763	0.02%	
65.385	Unidentified	1771	0.01%	
65.545	Unidentified	1774	0.04%	
65.671	Unidentified	1777	0.05%	
65.805	Unidentified	1779	0.03%	
65.930	Unidentified	1782	0.01%	
65.990	Nootkatone	1783	0.04%	IFRA
66.125	Unidentified	1785	0.02%	
66.548	Unidentified	1793	0.02%	
67.277	Unidentified	1807	0.01%	
72.425	Unidentified	1908	0.01%	
72.705	Unidentified	1914	0.01%	
73.311	Unidentified	1926	0.01%	
73.878	Unidentified	1938	0.03%	
74.085	Unidentified	1942	0.02%	
74.387	Unidentified	1948	0.03%	
75.532	Manool oxide	1972	0.01%	
76.222	Unidentified	1986	0%	
76.529	Unidentified	1992	0.01%	
78.351	Manool	2031	0.03%	
79.818	Abietadiene	2062	0.01%	
80.901	Unidentified	2086	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %
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Total Identified Compounds **95.82 %**

