

Sample & Analysis Information

Sample Information

Sample Name: Hinoki Essential Oil**Botanical Name:** Chamaecyparis obtusa**Lot Number:** 13369**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Taiwan**Analysis Date:** 3/11/2025**Manufacture Date:** March 2025

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

+21.52

1.48780

0.90792

Ret. Time	Component	Ret. Idx.	Conc. %	
12.279	Tricyclene	918	0.13%	
12.431	alpha-Thujene	921	0.05%	
12.892	alpha-Pinene	929	27.5%	
13.677	alpha-Fenchene	943	0.04%	
13.776	Camphene	945	0.17%	
13.975	Thuja-2,4(10)diene	948	0.02%	
15.062	Sabinene	967	0.04%	
15.376	beta-Pinene	973	0.42%	
16.002	Myrcene	984	0.71%	
17.090	alpha-Phellandrene	1003	0.01%	
17.236	delta-3-Carene	1005	0.01%	
17.754	alpha-Terpinene	1012	0.05%	
18.236	para-Cymene	1020	0.19%	
18.544	Limonene	1024	1.09%	IFRA
18.651	beta-Phellandrene	1026	0.03%	
18.751	1,8-Cineole	1027	0%	
20.438	gamma-Terpinene	1053	0.06%	
22.264	Terpinolene	1080	0.41%	
22.525	Fenchone	1084	0.01%	
22.572	para-Cymenene	1085	0.07%	
23.120	Unidentified	1093	0.02%	
23.210	alpha-Pinene oxide	1094	0.02%	
24.571	endo-Fenchol	1114	0.1%	
26.386	trans-Verbenol	1140	0.01%	
26.510	Camphor	1142	0.03%	
27.072	trans-beta-Terpineol	1150	0.02%	
28.231	Borneol	1167	0.34%	
28.834	Terpinen-4-ol	1175	0.49%	
29.238	para-Cymen-8-ol	1181	0.05%	
29.833	alpha-Terpineol	1189	0.83%	
30.356	Unidentified	1197	0.01%	
30.651	Unidentified	1201	0.01%	
31.969	Citronellol	1220	0.22%	IFRA
32.364	Unidentified	1226	0.03%	
33.584	Geraniol	1244	0.02%	IFRA
34.796	Geranial	1261	0.01%	IFRA
35.954	Bornyl acetate	1278	0.44%	
36.739	Terpin-1-en-4-yl acetate	1290	0.04%	
36.823	Carvacrol	1291	0.04%	
38.406	Methyl geranate	1314	0.02%	

Ret. Time	Component	Ret. Idx.	Conc. %	
39.162	Unidentified	1326	0.01%	
40.091	alpha-Terpinyl acetate	1340	1.35%	
40.282	Citronellyl acetate	1343	0.04%	IFRA
42.050	alpha-Copaene	1370	0.36%	
42.452	Elemene isomer	1376	0.03%	
42.932	beta-Elemene	1383	1.59%	
43.817	Unidentified	1396	0.02%	
44.868	beta-Caryophyllene	1413	0.22%	
45.510	beta-Copaene	1423	0.04%	
46.498	cis-Murrola-3,5-diene	1439	0.03%	
46.713	trans-Murrola-3,5-diene	1442	0.06%	
47.122	alpha-Humulene	1449	0.33%	
47.379	cis-Cadina-1(6),4-diene	1453	0.06%	
47.525	cis-Muurolo-4(14),5-diene	1455	0.26%	
47.905	Unidentified	1461	0.01%	
48.145	trans-Cadina-1(6),4-diene	1465	0.56%	
48.328	gamma-Muurolo-4(14),5-diene	1468	2.56%	
48.711	Germacrene D	1474	0.45%	
49.210	beta-Selinene	1482	0.5%	
49.377	trans-Muurolo-4(14),5-diene	1485	0.36%	
49.648	Unidentified	1489	0.79%	
49.794	alpha-Muurolo-4(14),5-diene	1491	3.97%	
50.684	gamma-Cadinene	1506	6.36%	
50.793	Cubebol	1508	0.09%	
51.000	delta-Cadinene	1511	10.8%	
51.176	trans-Calamenene	1514	0.46%	
51.264	Zonarene	1516	0.47%	
51.828	trans-Cadine-1,4-diene	1525	0.18%	
52.078	alpha-Cadinene	1529	0.9%	
52.331	alpha-Calacorene	1533	0.24%	
53.502	trans-Nerolidol	1553	0.62%	
53.640	Unidentified	1555	0.04%	
54.023	Unidentified	1562	0.02%	
54.434	Germacren D-4-ol	1569	0.1%	
54.640	Unidentified	1572	0.06%	
55.025	Unidentified	1579	0.16%	
55.029	Gleenol	1579	0.13%	
55.482	Unidentified	1586	0.02%	
55.591	Fokienol	1588	0.04%	
56.696	1,10-di-epi-Cubenol	1607	0.56%	

Ret. Time	Component	Ret. Idx.	Conc. %	
56.820	Unidentified	1609	0.1%	
57.044	Unidentified	1613	0.04%	
57.407	1-Epicubenol	1620	0.99%	
57.635	gamma-Eudesmol	1624	0.03%	
58.047	Unidentified	1631	0.03%	
58.224	tau-Cadinol	1634	6.15%	
58.341	epi-alpha-Cadinol	1636	7.67%	
58.476	delta-Cadinol	1638	2.82%	
59.001	alpha-Cadinol	1648	12.53%	
59.145	Intermedeol	1650	0.47%	
59.478	Unidentified	1656	0.03%	
59.599	Unidentified	1658	0.02%	
59.748	Unidentified	1661	0.01%	
59.917	Unidentified	1664	0.04%	
63.221	Unidentified	1723	0.02%	
64.099	Unidentified	1740	0.01%	
64.291	Unidentified	1743	0.03%	
65.192	Unidentified	1760	0.03%	
65.405	Unidentified	1764	0.03%	
66.328	Unidentified	1781	0.15%	
66.522	Unidentified	1785	0.14%	
67.357	Unidentified	1800	0.02%	
79.297	Unidentified	2041	0.03%	

Total Identified Compounds **98.07 %**

TIC

18,445,492

