

Sample & Analysis Information

Sample Information

Sample Name: Frankincense Serrata**Botanical Name:** Boswellia serrata**Lot Number:** 13272**Production Method:** Hydrodistillation**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 4/18/2025**Manufacture Date:** April 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

+29.68

1.45909

0.84340

Ret. Time	Component	Ret. Idx.	Conc. %	
3.821	2,4-Hexadiene	631	0%	
5.835	Toluene	763	0.01%	IFRA
10.737	Carene isomer	907	0.02%	
11.390	Hashishene	919	0.1%	
11.722	alpha-Thujene	925	68.42%	
12.064	alpha-Pinene	931	5.9%	
12.579	Thuja-2,4(10)diene	941	0.35%	
12.843	alpha-Fenchene	946	0.01%	
12.935	Camphene	947	0.07%	
13.134	Thujadiene isomer	951	0.01%	
14.190	Sabinene	970	5.72%	
14.479	beta-Pinene	976	0.36%	
15.106	Myrcene	987	0.82%	
15.720	delta-2-Carene	999	0.01%	
15.990	Unidentified	1003	0%	
16.152	alpha-Phellandrene	1005	1.75%	
16.301	delta-3-Carene	1008	5.11%	
16.801	alpha-Terpinene	1015	0.38%	
16.961	ortho-Cymene	1018	0.08%	
17.283	para-Cymene	1023	1.9%	
17.403	Unidentified	1025	0.17%	
17.577	Limonene	1027	1.91%	IFRA
17.676	beta-Phellandrene	1029	0.44%	
17.755	1,8-Cineole	1030	0.03%	
17.975	cis-beta-Ocimene	1034	0.6%	
18.652	trans-beta-Ocimene	1044	0.31%	
18.837	Unidentified	1047	0.05%	
19.191	Unidentified	1052	0.02%	
19.424	gamma-Terpinene	1056	0.8%	
20.197	trans-4-Thujanol	1068	0.04%	
20.340	Unidentified	1070	0.01%	
20.952	Isoterpinolene	1079	0.01%	
21.211	Terpinolene	1083	0.3%	
21.542	para-Cymenene	1089	0.01%	
22.163	Linalool	1098	0.08%	IFRA
22.240	trans-Sabinene hydrate	1099	0.03%	
22.629	alpha-Thujone	1105	0.02%	IFRA
23.039	Unidentified	1111	0.03%	
23.392	beta-Thujone	1116	0.18%	IFRA
23.826	cis-para-Menth-2-en-1-ol	1122	0.03%	

Ret. Time	Component	Ret. Idx.	Conc. %	
24.088	allo-Ocimene	1126	0.04%	
24.860	trans-Sabinol	1138	0.03%	
24.955	Unidentified	1139	0%	
25.065	trans-para-Menth-2-en-1-ol	1140	0.02%	
26.340	Unidentified	1159	0.01%	
26.445	para-Mentha-1,5-dien-8-ol	1161	0.02%	
26.897	Unidentified	1167	0.05%	
27.071	Unidentified	1170	0.01%	
27.682	Terpinen-4-ol	1179	0.58%	
28.121	para-Cymen-8-ol	1185	0.02%	
28.689	alpha-Terpineol	1193	0.04%	
28.899	Estragole	1196	1.45%	IFRA
29.226	alpha-Phellandrene epoxide	1201	0.02%	
32.395	Linalyl acetate	1248	0.03%	
34.723	Bornyl acetate	1282	0.02%	
36.384	Unidentified	1307	0.02%	
37.071	Unidentified	1317	0.02%	
38.857	alpha-Terpinyl acetate	1344	0.04%	
40.323	alpha-Ylangene	1367	0.02%	
40.741	alpha-Copaene	1373	0.12%	
41.257	beta-Bourbonene	1381	0.54%	
41.450	alpha-Bourbonene	1384	0.04%	
41.865	Unidentified	1390	0.01%	
41.989	Unidentified	1392	0.01%	
42.332	Methyleugenol	1397	0.12%	IFRA
43.452	beta-Ylangene	1415	0.05%	
43.495	Unidentified	1416	0.02%	
44.180	beta-Copaene	1427	0.05%	
44.396	trans-alpha-Bergamotene	1430	0.04%	
45.081	Isogermacrene D	1441	0.04%	
45.357	Unidentified	1446	0.01%	
46.571	trans-Cadina-1(6),4-diene	1465	0.02%	
46.988	gamma-Murolene	1472	0.03%	
47.362	Germacrene D	1478	0.11%	
47.470	gamma-Himachalene	1480	0.1%	
49.324	gamma-Cadinene	1510	0.01%	
49.632	delta-Cadinene	1515	0.02%	
50.263	Kessane	1526	0.11%	
51.348	Elemicin	1544	0.01%	
65.087	Phellandrene dimer	1790	0.02%	

Ret. Time	Component	Ret. Idx.	Conc. %
82.103	Serratol	2143	0.02%

Total Identified Compounds **99.59 %**

TIC

33,091,446

