



# Essential Oil University

## GC/MS Report

Item	Lot
Frankincense EO, Carterii, P&N <i>Boswellia carterii</i>	6D
Date	Analyst
12/2/2025	Dr. Robert S. Pappas

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**The analysis of this batch sample, Frankincense EO, Carterii, P&N, meets the expected chemical profile for authentic essential oil of *Boswellia carterii*. 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:** Frankincense EO, Carterii, P&N

**Botanical Name:** Boswellia carterii

**Lot Number:** 6D

**Production Method:** Hydrodistillation

**Sample Type:** EO - Single

**Country of Origin:** Somaliland

**Analysis Date:** 12/2/2025

**Manufacture Date:** October 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

-7.76

1.47068

0.86861



Ret. Time	Component	Ret. Idx.	Conc. %	
6.221	Toluene	763	0.03%	PROP. 65 IFRA
11.577	Unidentified	909	0.02%	
12.150	Hashishene	919	0.08%	
12.271	Tricyclene	921	0.06%	
12.427	alpha-Thujene	924	9.73%	
12.885	alpha-Pinene	932	39.54%	ALLERGEN
13.387	Thujadiene isomer	941	0.23%	
13.672	alpha-Fenchene	946	0.02%	
13.773	Camphene	947	0.52%	
13.973	Thuja-2,4(10)-diene	951	0.14%	
15.063	Sabinene	970	6.14%	
15.379	beta-Pinene	976	4.12%	ALLERGEN
15.994	Myrcene	987	3.31%	PROP. 65
16.075	Unidentified	988	0.04%	
16.935	Pseudolimonene	1003	0.02%	
17.090	alpha-Phellandrene	1005	1.39%	
17.235	delta-3-Carene	1007	0.87%	
17.403	Hexyl acetate	1010	0.02%	
17.749	alpha-Terpinene	1015	0.22%	ALLERGEN
17.904	ortho-Cymene	1017	0.03%	
18.238	para-Cymene	1022	2.99%	
18.369	Unidentified	1024	0.14%	
18.549	Limonene	1027	8.71%	ALLERGEN IFRA
18.653	beta-Phellandrene	1029	0.37%	
18.746	1,8-Cineole	1030	0.13%	
18.929	cis-beta-Ocimene	1033	0.09%	
19.627	trans-beta-Ocimene	1043	0.05%	
19.845	Unidentified	1046	0.06%	
20.442	gamma-Terpinene	1055	0.95%	
21.236	1-Octanol	1067	0.2%	
21.392	Pinol	1070	0.03%	
22.277	Terpinolene	1083	0.13%	ALLERGEN
22.598	para-Cymenene	1088	0.08%	
23.144	Perillene	1096	0.05%	
23.227	Linalool	1097	0.17%	ALLERGEN IFRA
23.344	Unidentified	1099	0.03%	
23.693	Isoamyl isovalerate	1104	0.05%	
23.925	Unidentified	1108	0.02%	
24.144	Unidentified	1111	0.03%	
24.512	beta-Thujone	1116	0.23%	IFRA



Ret. Time	Component	Ret. Idx.	Conc. %	
24.640	Myrcenol	1118	0.02%	
24.770	trans-para-Mentha-2,8-dienol	1120	0.02%	
24.962	cis-para-Menth-2-en-1-ol	1122	0.03%	
25.125	alpha-Campholenal	1125	0.1%	
25.300	Unidentified	1127	0.05%	
25.790	cis-para-Mentha-2,8-dien-1-ol	1134	0.03%	
25.995	trans-Sabinol	1137	0.05%	
26.102	trans-Pinocarveol	1139	0.25%	
26.160	cis-Verbenol	1140	0.07%	
26.415	trans-Verbenol	1143	0.28%	
26.762	alpha-Phellandrene-8-ol	1148	0.11%	
27.380	Unidentified	1157	0.02%	
27.465	trans-Pinocamphone	1158	0.04%	
27.596	Unidentified	1160	0.05%	
28.051	Unidentified	1167	0.14%	
28.224	Unidentified	1169	0.31%	
28.396	Unidentified	1172	0.02%	
28.863	Terpinen-4-ol	1178	0.67%	
29.282	para-Cymen-8-ol	1184	0.09%	
29.871	alpha-Terpineol	1193	0.55%	ALLERGEN
30.204	cis-Piperitol	1198	0.03%	
30.414	alpha-Phellandrene epoxide	1201	0.06%	
30.684	Verbenone	1205	0.15%	
30.902	Octyl acetate	1208	3.44%	
31.484	trans-Carveol	1216	0.13%	
32.398	cis-Carveol	1230	0.03%	
33.108	Unidentified	1240	0.04%	
33.211	Carvone	1242	0.08%	ALLERGEN IFRA
33.551	Unidentified	1247	0.04%	
34.663	3,5-Dimethoxytoluene	1263	0.03%	
35.973	Bornyl acetate	1282	0.2%	
36.852	Carvacrol	1295	0.04%	
40.146	alpha-Cubebene	1344	0.2%	
40.385	Eugenol	1348	0.21%	ALLERGEN IFRA
41.592	Cyclosativene	1366	0.05%	
42.039	alpha-Copaene	1373	0.49%	
42.563	beta-Bourbonene	1381	0.08%	
42.845	beta-Cubebene	1385	0.04%	
42.920	beta-Elemene	1387	0.45%	
44.072	beta-Maaliene	1404	0.05%	



Ret. Time	Component	Ret. Idx.	Conc. %	
44.866	beta-Caryophyllene	1417	4.14%	ALLERGEN
45.499	beta-Copaene	1427	0.03%	
45.692	trans-alpha-Bergamotene	1430	0.07%	
46.704	trans-Murrola-3,5-diene	1446	0.05%	
47.114	alpha-Humulene	1453	0.45%	
47.381	Alloaromodendrene	1457	0.14%	
48.138	trans-Cadina-1(6),4-diene	1469	0.07%	
48.310	gamma-Muurolene	1472	0.27%	
48.698	Germacrene D	1478	0.25%	
49.071	Unidentified	1484	0.06%	
49.198	beta-Selinene	1486	0.27%	
49.374	gamma-Amorphene	1489	0.11%	
49.617	alpha-Selinene	1493	0.33%	
49.771	alpha-Muurolene	1495	0.14%	
50.657	gamma-Cadinene	1510	0.4%	
50.784	Cubebol	1512	0.22%	
50.954	delta-Cadinene	1515	0.76%	
51.045	Unidentified	1516	0.04%	
51.115	cis-Calamenene	1518	0.03%	
51.235	Zonarene	1520	0.04%	
51.811	trans-Cadina-1,4-diene	1529	0.04%	
52.064	alpha-Cadinene	1534	0.03%	
53.564	Unidentified	1559	0.04%	
54.275	Unidentified	1571	0.03%	
54.430	Spathulenol	1573	0.04%	
54.759	Caryophyllene oxide	1579	0.51%	
55.477	Viridiflorol	1591	0.09%	
56.355	Copaborneol	1606	0.08%	
56.358	Humulene epoxide II	1606	0.07%	
56.593	Eudesmol analogue	1610	0.05%	
56.687	1,10-di-epi-Cubenol	1612	0.07%	
57.390	Epicubenol	1624	0.05%	
58.192	tau-Cadinol	1639	0.48%	
58.449	alpha-Muurolol	1643	0.03%	
58.938	Cadin-4-en-10-ol	1652	0.11%	
59.149	Unidentified	1656	0.03%	
59.767	Unidentified	1666	0.02%	
66.494	Phellandrene dimer	1790	0.03%	
74.520	Neocembrene	1949	0.04%	
77.312	Verticilla-4(20),7,11-triene	2006	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %
83.001	Cembrenol	2130	0.02%
83.472	Incensole	2140	0.07%
83.570	Serratol	2142	0.25%
84.317	Incensyl acetate	2159	0.08%

Total Identified Compounds **98.71 %**



TIC  
25,762,757

