



Essential Oil University

GC/MS Report

Item	Lot
Holy Basil Leaf (Tulsi) EO <i>Ocimum sanctum</i>	3F
Date	Analyst
11/7/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Holy Basil Leaf (Tulsi) EO, meets the expected chemical profile for authentic essential oil of *Ocimum sanctum*. 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:** Holy Basil Leaf (Tulsi) EO**Botanical Name:** Ocimum sanctum**Lot Number:** 3F**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 11/7/2025**Manufacture Date:** September 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

-5.72

1.51819

0.98290



Ret. Time	Component	Ret. Idx.	Conc. %	
4.225	3-Methylbutanal	637	0%	
10.908	2,5-Diethyltetrahydrofuran	895	0.02%	
12.311	Tricyclene	922	0.01%	
12.882	alpha-Pinene	932	0.31%	ALLERGEN
13.819	Camphene	948	0.19%	
15.104	Sabinene	971	0.02%	
15.423	beta-Pinene	976	0.71%	ALLERGEN
16.040	Myrcene	987	0.02%	PROP. 65
18.277	para-Cymene	1023	0.01%	
18.589	Limonene	1028	0.23%	ALLERGEN IFRA
18.730	beta-Phellandrene	1030	0.01%	
18.798	1,8-Cineole	1031	0.15%	
18.980	cis-beta-Ocimene	1033	0.02%	
19.677	trans-beta-Ocimene	1044	0.4%	
22.327	Terpinolene	1084	0.01%	ALLERGEN
23.284	Linalool	1098	0.09%	ALLERGEN IFRA
26.222	Geijeren	1141	0.01%	
26.618	Camphor	1146	0.04%	ALLERGEN
28.335	Borneol	1171	0.27%	
28.926	Terpinen-4-ol	1179	0.01%	
29.939	alpha-Terpineol	1194	0.02%	ALLERGEN
33.686	Chavicol	1248	0.02%	
35.208	trans-Cinnamaldehyde	1271	0.04%	ALLERGEN IFRA
40.218	alpha-Cubebene	1346	0.07%	
40.649	Eugenol	1352	43.12%	ALLERGEN IFRA
42.119	alpha-Copaene	1374	0.72%	
42.520	Elemene isomer	1381	0.44%	
42.641	beta-Bourbonene	1382	0.14%	
43.028	beta-Elemene	1388	12.49%	
43.317	beta-Cubebene	1393	0.04%	
43.634	Methyleugenol	1397	0.02%	PROP. 65 IFRA
43.986	cis-beta-Caryophyllene	1403	0.04%	ALLERGEN
44.683	alpha-Barbatene	1414	0.04%	
45.009	beta-Caryophyllene	1419	29.48%	ALLERGEN
45.464	Unidentified	1427	0.04%	
45.572	beta-Copaene	1428	0.05%	
45.764	trans-alpha-Bergamotene	1431	0.71%	
45.935	Unidentified	1434	0.01%	
46.073	Isobazzanene	1436	0.01%	
46.230	cis-beta-Farnesene	1439	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
46.563	trans-Murrola-3,5-diene	1444	0.04%	
46.802	Unidentified	1448	0.12%	
46.985	trans-beta-Farnesene	1451	0.05%	
47.191	alpha-Humulene	1454	2.32%	
47.455	Alloaromodendrene	1458	0.04%	
47.582	cis-Cadina-1(6),4-diene	1460	0.04%	
47.930	Unidentified	1466	0.01%	
48.080	Unidentified	1468	0.01%	
48.282	Selina-4,11-diene	1471	0.26%	
48.376	gamma-Murolene	1473	0.06%	
48.773	Germacrene D	1479	1.64%	
48.937	trans-beta-Bergamotene	1482	0.06%	
49.273	beta-Selinene	1487	0.95%	
49.451	gamma-Amorphene	1490	0.05%	
49.698	alpha-Selinene	1494	1.13%	
49.845	alpha-Murolene	1496	0.03%	
50.202	Unidentified	1502	0.06%	
50.392	Unidentified	1505	0.25%	
50.720	gamma-Cadinene	1511	0.05%	
50.852	Cubebol	1513	0.03%	
51.020	delta-Cadinene	1516	0.39%	
51.354	beta-Sesquiphellandrene	1522	0.04%	
51.530	Unidentified	1525	0.04%	
51.713	Kessane	1528	0.06%	
51.865	trans-Cadina-1,4-diene	1530	0.02%	
52.004	Unidentified	1533	0.03%	
52.130	Unidentified	1535	0.02%	
52.803	alpha-Elemol	1546	0.15%	
53.545	trans-Nerolidol	1558	0.08%	
54.826	Caryophyllene oxide	1580	0.33%	
55.547	Viridiflorol	1592	0.07%	
55.819	Unidentified	1597	0.02%	
56.088	Unidentified	1601	0.02%	
56.446	Humulene epoxide II	1608	0.02%	
56.751	1,10-di-epi-Cubenol	1613	0.02%	
56.890	Unidentified	1615	0.07%	
57.176	Unidentified	1621	0.02%	
57.453	Epicubenol	1625	0.01%	
57.696	gamma-Eudesmol	1630	0.05%	
57.980	Unidentified	1635	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
58.270	Unidentified	1640	0.22%	
58.506	alpha-Muurolol	1644	0.02%	
59.020	Unidentified	1653	0.22%	
59.186	Intermedeol	1656	0.42%	
59.425	Unidentified	1660	0.02%	
59.549	Intermedeol isomer	1663	0.04%	
59.803	Unidentified	1667	0.07%	
60.941	Unidentified	1687	0.02%	
61.937	Unidentified	1705	0.04%	
62.735	Unidentified	1720	0.03%	
62.840	Unidentified	1722	0.05%	
63.128	Unidentified	1727	0.01%	
94.781	Unidentified	2407	0.01%	
102.472	Unidentified	2606	0.16%	

Total Identified Compounds **98.46 %**



TIC
16,051,723

