



Essential Oil University

GC/MS Report

Item	Lot
Holy Basil Leaf (Tulsi) EO <i>Ocimum sanctum</i>	9M
Date	Analyst
12/15/2025	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:** 9M**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 12/15/2025**Manufacture Date:** December 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

1.51845

0.98317



Ret. Time	Component	Ret. Idx.	Conc. %	
10.860	2,5-Diethyltetrahydrofuran	894	0.02%	
12.253	Tricyclene	921	0.01%	
12.820	alpha-Pinene	931	0.28%	ALLERGEN
13.750	Camphene	947	0.17%	
15.036	Sabinene	970	0.02%	
15.351	beta-Pinene	975	0.64%	ALLERGEN
15.973	Myrcene	986	0.02%	PROP. 65
16.946	Hex-(3Z)-enyl acetate	1003	0.01%	
18.212	para-Cymene	1022	0.01%	
18.512	Limonene	1026	0.21%	ALLERGEN IFRA
18.615	beta-Phellandrene	1028	0.01%	
18.719	1,8-Cineole	1030	0.15%	
18.903	cis-beta-Ocimene	1032	0.02%	
19.603	trans-beta-Ocimene	1043	0.32%	
20.424	Terpinolene	1055	0.01%	ALLERGEN
23.202	Linalool	1097	0.08%	ALLERGEN IFRA
26.129	Geijeren	1139	0.01%	
26.527	Camphor	1145	0.04%	ALLERGEN
28.244	Borneol	1170	0.24%	
28.638	Menthol	1175	0.02%	ALLERGEN
29.850	alpha-Terpineol	1193	0.02%	ALLERGEN
33.606	Chavicol	1247	0.01%	
40.120	alpha-Cubebene	1344	0.07%	
40.532	Eugenol	1350	43.72%	ALLERGEN IFRA
42.020	alpha-Copaene	1373	0.69%	
42.421	Elemene isomer	1379	0.4%	
42.542	beta-Bourbonene	1381	0.13%	
42.790	beta-Cubebene	1385	0.05%	
42.921	beta-Elemene	1387	12.2%	
43.219	Unidentified	1391	0.04%	
43.548	Methyleugenol	1396	0.03%	PROP. 65 IFRA
43.780	Unidentified	1400	0%	
43.886	cis-beta-Caryophyllene	1401	0.05%	ALLERGEN
44.576	alpha-Barbatene	1412	0.04%	
44.895	beta-Caryophyllene	1417	30.4%	ALLERGEN
45.359	Unidentified	1425	0.04%	
45.471	beta-Copaene	1427	0.05%	
45.664	trans-alpha-Bergamotene	1430	0.65%	
45.978	Isobazzanene	1435	0.01%	
46.123	Unidentified	1437	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %
46.700	Unidentified	1446	0.1%
46.895	trans-beta-Farnesene	1449	0.04%
47.088	alpha-Humulene	1452	2.29%
47.353	Alloaromodendrene	1457	0.03%
47.481	cis-Cadina-1(6),4-diene	1459	0.03%
47.981	Unidentified	1467	0%
48.186	Selina-4,11-diene	1470	0.24%
48.282	gamma-Muurolene	1471	0.06%
48.675	Germacrene D	1478	1.53%
48.838	trans-beta-Bergamotene	1480	0.06%
49.170	beta-Selinene	1486	0.9%
49.350	gamma-Amorphene	1489	0.05%
49.600	alpha-Selinene	1493	1.07%
49.739	alpha-Muurolene	1495	0.03%
50.097	Unidentified	1500	0.04%
50.297	Unidentified	1504	0.22%
50.627	gamma-Cadinene	1509	0.05%
50.754	Cubebol	1512	0.02%
50.926	delta-Cadinene	1514	0.35%
51.263	beta-Sesquiphellandrene	1520	0.02%
51.433	trans-gamma-Bisabolene	1523	0.02%
51.615	Kessane	1526	0.06%
51.899	Unidentified	1531	0.01%
52.038	Unidentified	1533	0.01%
52.706	alpha-Elemol	1544	0.12%
53.355	Germacrene B	1555	0.02%
53.448	trans-Nerolidol	1557	0.04%
54.726	Caryophyllene oxide	1578	0.31%
55.449	Viridiflorol	1590	0.07%
55.720	Unidentified	1595	0.01%
55.999	Unidentified	1600	0.02%
56.345	Humulene epoxide II	1606	0.02%
56.655	1,10-di-epi-Cubenol	1611	0.01%
56.791	Unidentified	1614	0.06%
57.077	Unidentified	1619	0.01%
57.358	Epicubenol	1624	0.01%
57.597	gamma-Eudesmol	1628	0.05%
57.750	Unidentified	1631	0.01%
58.173	Unidentified	1638	0.2%
58.416	alpha-Muurolol	1643	0.02%



Ret. Time	Component	Ret. Idx.	Conc. %
58.922	Unidentified	1652	0.19%
59.088	Intermedeol	1654	0.37%
59.347	Unidentified	1659	0.01%
59.447	Intermedeol isomer	1661	0.03%
59.705	Unidentified	1665	0.05%
60.853	Unidentified	1686	0.01%
61.841	Unidentified	1703	0.03%
62.640	Unidentified	1718	0.02%
62.748	Unidentified	1720	0.04%
94.684	Unidentified	2405	0.01%
102.372	Unidentified	2603	0.11%

Total Identified Compounds **98.73 %**



TIC
10,373,072

