



Essential Oil University

GC/MS Report

Item	Lot
Holy Basil Leaf (Tulsi) EO <i>Ocimum sanctum</i>	0H
Date	Analyst
6/3/2025	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:** 0H**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 6/3/2025**Manufacture Date:** May 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

-7.12

1.51811

0.98275



Ret. Time	Component	Ret. Idx.	Conc. %	
10.834	2,5-Diethyltetrahydrofuran	890	0.02%	
12.207	Tricyclene	917	0.01%	
12.776	alpha-Pinene	927	0.32%	
13.701	Camphene	943	0.19%	
14.987	Sabinene	966	0.02%	
15.298	beta-Pinene	971	0.7%	
15.928	Myrcene	983	0.02%	
18.155	para-Cymene	1019	0.01%	
18.463	Limonene	1023	0.25%	IFRA
18.575	beta-Phellandrene	1025	0%	
18.658	1,8-Cineole	1026	0.15%	
18.859	cis-beta-Ocimene	1029	0.02%	
19.548	trans-beta-Ocimene	1039	0.37%	
20.356	gamma-Terpinene	1052	0.01%	
22.176	Terpinolene	1079	0.01%	
23.125	Linalool	1093	0.08%	IFRA
24.066	Unidentified	1107	0%	
26.054	Geijeren	1135	0.01%	
26.418	Camphor	1141	0.04%	
28.138	Borneol	1165	0.26%	
28.748	Terpinen-4-ol	1174	0.01%	
29.752	alpha-Terpineol	1188	0.02%	
33.494	Unidentified	1243	0.02%	
39.277	delta-Elemene	1328	0.01%	
40.063	alpha-Cubebene	1340	0.08%	
40.473	Eugenol	1346	43.42%	IFRA
41.532	alpha-Ylangene	1362	0.01%	
41.960	alpha-Copaene	1368	0.84%	
42.360	Elemene isomer	1374	0.46%	
42.480	beta-Bourbonene	1376	0.14%	
42.872	beta-Elemene	1382	12.59%	
43.165	Unidentified	1387	0.05%	
43.453	Methyleugenol	1391	0.03%	IFRA
43.824	cis-beta-Caryophyllene	1396	0.07%	
44.505	alpha-Barbatene	1407	0.05%	
44.851	beta-Caryophyllene	1413	28.51%	
45.065	Unidentified	1416	0.03%	
45.298	Unidentified	1420	0.06%	
45.407	beta-Copaene	1422	0.08%	
45.610	trans-alpha-Bergamotene	1425	0.7%	



Ret. Time	Component	Ret. Idx.	Conc. %	
45.755	Unidentified	1427	0.01%	
45.907	Isobazzanene	1429	0.02%	
46.078	alpha-Cedrene	1432	0.01%	IFRA
46.404	Cadina-3,5-diene	1437	0.03%	
46.634	alpha-Himachalene	1441	0.13%	
46.843	trans-beta-Farnesene	1444	0.04%	
47.025	alpha-Humulene	1447	2.45%	
47.290	Alloaromodendrene	1451	0.04%	
47.420	cis-Cadina-1(6),4-diene	1454	0.04%	
47.825	Unidentified	1460	0.01%	
47.922	Unidentified	1462	0.02%	
48.119	Selina-4,11-diene	1465	0.28%	
48.222	trans-Cadina-1(6),4-diene	1466	0.07%	
48.609	Germacrene D	1472	1.69%	
48.783	trans-beta-Bergamotene	1475	0.06%	
49.105	beta-Selinene	1480	1.01%	
49.286	trans-Muurolo-4(14),5-diene	1483	0.06%	
49.538	alpha-Selinene	1487	1.2%	
49.683	alpha-Muuroloene	1490	0.04%	
49.995	Unidentified	1495	0.02%	
50.035	Unidentified	1495	0.04%	
50.231	Unidentified	1498	0.24%	
50.558	gamma-Cadinene	1504	0.05%	
50.687	Cubebol	1506	0.02%	
50.866	delta-Cadinene	1509	0.39%	
51.201	beta-Sesquiphellandrene	1514	0.01%	
51.383	trans-gamma-Bisabolene	1518	0.02%	
51.542	Kessane	1520	0.06%	
51.715	trans-Cadine-1,4-diene	1523	0.02%	
51.817	Unidentified	1525	0.03%	
51.968	Unidentified	1527	0.02%	
52.212	alpha-Calacorene	1531	0.02%	
52.411	Unidentified	1535	0.01%	
52.638	alpha-Elemol	1539	0.13%	
53.290	Germacrene B	1549	0.02%	
53.396	trans-Nerolidol	1551	0.05%	
54.291	Unidentified	1566	0.01%	
54.653	Caryophyllene oxide	1572	0.35%	
55.374	Viridiflorol	1584	0.07%	
55.638	Unidentified	1589	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
55.922	Unidentified	1594	0.02%	
56.271	Humulene epoxide II	1600	0.02%	
56.480	Unidentified	1603	0.01%	
56.585	1,10-di-epi-Cubenol	1605	0.03%	
56.718	Unidentified	1607	0.08%	
56.999	Unidentified	1612	0.01%	
57.294	1-Epicubenol	1618	0.02%	
57.521	gamma-Eudesmol	1622	0.06%	
57.650	Unidentified	1624	0.01%	
57.809	Unidentified	1627	0.01%	
58.102	Unidentified	1632	0.22%	
58.348	tau-Cadinol	1636	0.02%	
58.855	Cubenol	1645	0.2%	
59.014	Intermedeol	1648	0.4%	
59.267	Unidentified	1652	0.03%	
59.370	Intermedeol	1654	0.04%	
59.632	Unidentified	1659	0.07%	
60.769	Unidentified	1679	0.02%	
61.231	Unidentified	1687	0.01%	
61.770	Unidentified	1697	0.03%	
62.570	Unidentified	1711	0.02%	
62.675	Unidentified	1713	0.06%	
62.949	Unidentified	1718	0.02%	
63.977	Unidentified	1737	0.01%	
64.411	Unidentified	1745	0.01%	
94.651	Unidentified	2394	0.01%	
96.734	Unidentified	2446	0.01%	
102.353	Unidentified	2591	0.08%	

Total Identified Compounds **98.68 %**

