



GC/MS Report

GC4

Item	Lot 13603
98401-58	
<i>Ocimum basilicum</i>	
Basil EO ct. Methyl Chavicol	
Date	Analyst
7/7/2025	N. K

Sample & Analysis Information

Sample Information

Sample Name: Basil, Sweet**Botanical Name:** Ocimum basilicum**Lot Number:** 13603**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 7/7/2025**Manufacture Date:** July 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

-6.96

1.50280

0.93917

Ret. Time	Component	Ret. Idx.	Conc. %	
3.567	Unidentified	606	0%	
3.976	3-Methylbutanal	647	0.01%	
5.075	3-Methyl-1-butanol	727	0%	
5.811	Toluene	762	0%	
6.934	2-Hexanol	809	0%	
10.288	Nonane	898	0%	
11.998	alpha-Pinene	930	0.06%	
12.880	Camphene	946	0%	
14.126	Sabinene	969	0.01%	
14.428	beta-Pinene	975	0.04%	
14.469	Unidentified	976	0.04%	
14.754	6-Methyl hept-5-en-2-one	981	0.17%	
15.051	Myrcene	986	0.04%	
15.095	Unidentified	987	0.01%	
15.256	1-Isopropyl-1-methylcyclohexane	990	0.06%	
15.488	3-Octanol	994	0.02%	
15.689	Decane	998	0.02%	
15.907	Octanal	1002	0.02%	
15.987	Hex-(3Z)-enyl acetate	1003	0.01%	
17.224	para-Cymene	1022	0.01%	
17.412	2-Ethyl hexanol	1025	0.01%	
17.514	Limonene	1026	0.1%	IFRA
17.692	1,8-Cineole	1029	0.13%	
17.920	cis-beta-Ocimene	1033	0.01%	
18.595	trans-beta-Ocimene	1043	0.17%	
20.161	cis-Linalool oxide (furanoid)	1067	0.08%	
21.217	trans-Linalool oxide (furanoid)	1084	0.08%	
21.366	Fenchone	1086	0.01%	
22.192	Linalool	1099	20.12%	IFRA
22.363	Hotrienol	1101	0.02%	
23.045	2-Ethyl hexanoic acid	1111	0.05%	
24.719	Epiphotocitral A	1135	0.01%	
25.311	Camphor	1144	0.04%	
25.424	trans-Chrysanthemal	1146	0.03%	
25.937	Menthone	1153	0.08%	
26.450	Unidentified	1161	0%	
26.543	Isomenthone	1162	0.04%	
26.884	Neomenthol	1167	0.03%	
27.195	cis-Linalool oxide (pyranoid)	1172	0.01%	
27.438	Menthol	1175	0.65%	

Ret. Time	Component	Ret. Idx.	Conc. %	
27.659	Unidentified	1178	0.04%	
28.249	2,6-Dimethyl-3,7-octadiene-2,6-diol	1187	0.01%	
28.666	alpha-Terpineol	1193	0.14%	
29.034	Estragole	1198	70.85%	IFRA
29.709	Octyl acetate	1208	0.03%	
30.611	Nerol	1221	0.07%	
30.789	Citronellol	1224	0%	
31.550	Neral	1235	0.65%	IFRA
31.705	Unidentified	1238	0.01%	
31.948	Carvone	1241	0.04%	IFRA
32.372	Geraniol	1247	0.12%	IFRA
32.425	Unidentified	1248	0.03%	
32.609	Piperitone	1251	0.02%	
33.562	Geranial	1265	0.89%	IFRA
34.835	trans-Anethole	1284	0.02%	
35.064	Menthyl acetate	1287	0.03%	
35.809	Tridecane	1298	0.04%	
39.097	Eugenol	1348	0.03%	IFRA
39.585	Neryl acetate	1355	0.01%	
40.682	alpha-Copaene	1372	0.04%	
40.866	Geranyl acetate	1375	0.02%	
41.035	Unidentified	1378	0.01%	
41.254	(3Z)-Hexenyl-hex-(3Z)-enoate	1381	0.08%	
41.468	7-epi-Sesquithujene	1384	0.03%	
41.572	beta-Elemene	1386	0.04%	
42.274	Methyleugenol	1396	0.02%	IFRA
42.352	Tetradecane	1398	0.04%	
42.692	alpha-Gurjunene	1403	0.02%	
42.827	Unidentified	1405	0.01%	
43.087	cis-alpha-Bergamotene	1409	0.02%	
43.470	beta-Caryophyllene	1415	0.52%	
43.980	Unidentified	1424	0.01%	
44.111	beta-Copaene	1426	0.02%	
44.190	Unidentified	1427	0%	
44.337	trans-alpha-Bergamotene	1429	0.63%	
44.485	Unidentified	1432	0.01%	
44.812	cis-beta-Farnesene	1437	0.06%	
45.585	trans-beta-Farnesene	1449	0.24%	
45.710	alpha-Humulene	1451	0.23%	
46.934	gamma-Murolene	1471	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %	
47.304	Germacrene D	1477	0.3%	
47.493	trans-beta-Bergamotene	1480	0.08%	
47.792	beta-Selinene	1485	0.02%	
48.194	Unidentified	1491	0.08%	
48.396	Unidentified	1494	0.02%	
48.577	Unidentified	1497	0.04%	
48.970	beta-Bisabolene	1504	0.1%	
49.100	Unidentified	1506	0%	
49.270	Unidentified	1509	0.01%	
49.577	delta-Cadinene	1514	0.04%	
49.924	beta-Sesquiphellandrene	1520	0.01%	
50.920	trans-alpha-Bisabolene	1537	1.9%	
52.120	trans-Nerolidol	1557	0.02%	
52.531	trans-para-Methoxycinnamaldehyde	1564	0.08%	
53.018	Spathulenol	1572	0.01%	
53.317	Caryophyllene oxide	1577	0.04%	
54.943	Humulene epoxide II	1605	0.01%	
59.223	alpha-Bisabolol	1681	0.02%	IFRA

Total Identified Compounds 99.74 %

GC/MS Report: Chromatogram

