



Sample Information

Sample Name: Basil Sweet Essential Oil**Botanical Name:** Ocimum basilicum**Lot Number:** 13361**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 7/11/2025**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

0.93922



Ret. Time	Component	Ret. Idx.	Conc. %	
4.226	3-Methylbutanal	637	0.01%	
11.075	Nonane	900	0%	
12.890	alpha-Pinene	932	0.06%	
14.938	Unidentified	968	0.01%	
15.117	Sabinene	971	0.01%	
15.455	beta-Pinene	977	0.04%	
15.464	trans-para-Menthane	977	0.05%	
15.741	6-Methyl hept-5-en-2-one	982	0.17%	
15.815	para-Menth-3-ene	983	0.03%	
16.056	Myrcene	988	0.08%	
16.120	Unidentified	989	0.01%	
16.298	cis-para-Menthane	992	0.07%	
16.500	3-Octanol	995	0.02%	
16.719	Decane	999	0.02%	
16.935	Octanal	1003	0.01%	
17.824	alpha-Terpinene	1016	0%	
18.298	para-Cymene	1023	0.02%	
18.476	2-Ethyl hexanol	1026	0.01%	
18.601	Limonene	1028	0.2%	IFRA
18.750	beta-Phellandrene	1030	0.01%	
18.812	1,8-Cineole	1031	0.16%	
19.000	cis-beta-Ocimene	1034	0.02%	
19.693	trans-beta-Ocimene	1044	0.2%	
20.511	gamma-Terpinene	1057	0%	
21.339	cis-Linalool oxide (furanoid)	1069	0.09%	
22.375	Terpinolene	1085	0.01%	
22.426	trans-Linalool oxide (furanoid)	1085	0.08%	
22.599	Fenchone	1088	0.01%	
23.380	Linalool	1100	22.97%	IFRA
23.554	Hotrienol	1102	0.02%	
24.148	2-Ethyl hexanoic acid	1111	0.03%	
25.988	Epiphotocitral A	1137	0.01%	
26.639	Camphor	1147	0.05%	
26.710	trans-Chrysanthemal	1148	0.03%	
27.238	Menthone	1155	0.09%	
27.863	Isomenthone	1164	0.04%	
28.202	Neomenthol	1169	0.03%	
28.500	trans-Linalool oxide ((pyranoid)	1173	0%	
28.747	Menthol	1177	0.75%	
28.967	Unidentified	1180	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
29.514	Unidentified	1188	0.02%	
29.990	alpha-Terpineol	1195	0.14%	
30.329	Estragole	1200	66.69%	IFRA
31.004	Octyl acetate	1209	0.03%	
31.928	Nerol	1223	0.06%	
32.874	Neral	1237	0.7%	IFRA
33.292	Carvone	1243	0.04%	IFRA
33.692	Geraniol	1249	0.14%	IFRA
33.982	Piperitone	1253	0.02%	
34.896	Geranial	1266	1.03%	IFRA
35.225	trans-Cinnamaldehyde	1271	0.05%	IFRA
36.170	trans-Anethole	1285	0.02%	
36.422	Menthyl acetate	1288	0.04%	
37.174	Tridecane	1299	0.06%	
40.464	Eugenol	1349	0.04%	IFRA
40.965	Neryl acetate	1357	0.02%	
42.130	alpha-Copaene	1375	0.05%	
42.245	Geranyl acetate	1376	0.02%	
42.523	beta-Bourbonene	1381	0.01%	
42.650	(3Z)-Hexenyl hex-(3Z)-enoate	1383	0.08%	
42.901	7-epi-Sesquithujene	1386	0.03%	
43.011	beta-Elementene	1388	0.03%	
43.639	Methyleugenol	1398	0.02%	IFRA
43.757	Tetradecane	1399	0.03%	
44.168	alpha-Gurjunene	1406	0.02%	
44.311	Unidentified	1408	0.01%	
44.538	cis-alpha-Bergamotene	1412	0.03%	
44.955	beta-Caryophyllene	1418	0.58%	
45.461	Unidentified	1426	0.01%	
45.588	Unidentified	1429	0.02%	
45.785	trans-alpha-Bergamotene	1432	0.74%	
46.257	Sesquisabinene	1439	0.06%	
47.009	trans-beta-Farnesene	1451	0.26%	
47.209	alpha-Humulene	1454	0.25%	
48.407	trans-Cadina-1(6),4-diene	1473	0.01%	
48.792	Germacrene D	1480	0.32%	
48.968	trans-beta-Bergamotene	1482	0.09%	
49.289	beta-Selinene	1488	0.02%	
49.679	Bicyclogermacrene	1494	0.08%	
49.877	alpha-Murolene	1497	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
50.011	Pentadecane	1499	0.03%	
50.429	beta-Bisabolene	1506	0.11%	
50.749	gamma-Cadinene	1511	0.02%	
51.046	delta-Cadinene	1516	0.05%	
52.378	trans-alpha-Bisabolene	1539	2.23%	
53.580	trans-Nerolidol	1559	0.02%	
53.959	trans-para-Methoxycinnamaldehyde	1565	0.07%	
54.520	Spathulenol	1575	0.01%	
54.845	Caryophyllene oxide	1580	0.04%	
56.470	Humulene epoxide II	1608	0.01%	
59.035	Unidentified	1654	0.01%	
60.724	alpha-Bisabolol	1683	0.01%	IFRA
65.101	Benzyl benzoate	1764	0.01%	IFRA

Total Identified Compounds **99.84 %**

TIC
20,308,875

