



Essential Oil University

GC/MS Report

Item	Lot
Basil (Sweet) EO ct. Linalool <i>Ocimum basilicum</i>	1D
Date	Analyst
12/6/2024	Dr. Robert S. Pappas

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The analysis of this batch sample, Basil (Sweet) EO ct. Linalool, meets the expected chemical profile for authentic essential oil of *Ocimum basilicum*. 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:** Basil (Sweet) EO ct. Linalool**Botanical Name:** Ocimum basilicum**Lot Number:** 1D**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 12/6/2024**Manufacture Date:** September 2023

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

-13.60

1.47147

0.88897



Ret. Time	Component	Ret. Idx.	Conc. %	
3.985	3-Methylbutanal	673	0.01%	
4.089	2-Methylbutanal	678	0.01%	
11.702	alpha-Thujene	921	0.02%	
12.103	alpha-Pinene	928	0.25%	
12.993	Camphene	945	0.05%	
14.246	Sabinene	967	0.23%	
14.544	beta-Pinene	973	0.48%	
15.172	Myrcene	984	0.45%	
16.102	trans-3-Hexenyl acetate	1001	0.02%	
16.875	alpha-Terpinene	1013	0.04%	
17.355	para-Cymene	1020	0.07%	
17.653	Limonene	1025	0.25%	IFRA
17.844	1,8-cineole	1028	9.03%	
18.047	cis-beta-Ocimene	1031	0.18%	
18.722	trans-beta-Ocimene	1041	0.62%	
19.505	gamma-Terpinene	1053	0.05%	
20.297	trans-Sabinene hydrate	1065	0.15%	
21.299	alpha-Terpinene	1081	0.07%	
21.370	cis-Linalool oxide (furanoid)	1082	0.11%	
22.438	Linalool	1098	64.74%	IFRA
22.796	Octen-3-yl acetate	1104	0.03%	IFRA
24.185	allo-Ocimene	1124	0.02%	
24.934	trans-Myroxide	1135	0.07%	
25.478	Camphor	1142	0.75%	
26.705	Isomenthone	1160	0.01%	
27.069	delta-Terpineol	1166	0.07%	
27.180	Borneol	1167	0.07%	
27.781	Terpinen-4-ol	1176	0.24%	
28.783	alpha-Terpineol	1190	0.45%	
28.993	Methyl chavicol	1193	0.81%	IFRA
29.855	Octyl acetate	1206	0.12%	
30.760	Nerol	1219	0.01%	
30.926	Citronellol	1222	0.08%	IFRA
32.100	Carvone	1239	0.01%	IFRA
32.525	Geraniol	1245	0.66%	IFRA
34.104	Citronellyl formate	1268	0.02%	
34.835	Bornyl acetate	1279	1.47%	
34.994	Isobornyl acetate	1281	0.02%	
37.995	delta-Elementene	1327	0.02%	
38.428	exo-2-Hydroxycineole acetate	1333	0.05%	



Ret. Time	Component	Ret. Idx.	Conc. %	
38.982	alpha-Copaene	1342	0.02%	
39.281	Eugenol	1346	3.83%	IFRA
39.448	Epoxy-alpha-terpenyl acetate	1349	0.09%	
39.723	Unidentified	1353	0.03%	
40.860	Copaene	1370	0.09%	
41.040	Geranyl acetate	1373	0.02%	
41.273	beta-Elemene	1377	0.06%	
41.376	beta-Bourbonene	1378	0.15%	
41.655	alpha-Copaene	1382	0.03%	
41.756	beta-Elemene	1384	1.44%	
42.061	alpha-Cubenene	1389	0.04%	
42.425	cis-Methyl Isoeugenol	1394	0.5%	
43.264	alpha-cis-Bergamotene	1407	0.03%	
43.654	beta-Caryophyllene	1413	1.71%	
43.943	beta-Cedrene	1418	0.03%	IFRA
44.324	Calarene	1424	0.1%	
44.524	trans-alpha-Bergamotene	1427	2.66%	
44.654	alpha-Guaiene	1430	0.4%	
44.821	beta-Copaene	1432	0.01%	
44.991	cis-beta-Farnesene	1435	0.03%	
45.200	Unidentified	1438	0.01%	
45.294	Cadina-3,5-diene	1440	0.06%	
45.770	trans-beta-Farnesene	1447	0.05%	
45.897	alpha-Humulene	1449	0.39%	
46.033	Isocaryophyllene	1452	0.02%	
46.165	delta-Amorphene	1454	0.02%	
46.307	cis-Muurolo-4(14),5-diene	1456	0.22%	
46.567	beta-Acoradiene	1460	0.02%	
47.121	alpha-Neocallitropsene	1469	0.03%	
47.487	Germacrene D	1475	1.49%	
47.673	(Z,E)-alpha-Farnesene	1478	0.17%	
47.807	gamma-Patchoulene	1480	0.01%	
47.975	beta-Selinene	1483	0.05%	
48.376	Icyclogermacrene	1489	0.57%	
48.587	epsilon-Amorphene	1493	0.02%	
48.760	alpha-Bulnesene	1495	0.64%	
49.142	beta-Bisabolene	1502	0.07%	
49.447	gamma-Cadinene	1507	1.24%	
49.753	delta-Cadinene	1512	0.07%	
49.856	cis-Calamenene	1514	0.1%	



Ret. Time	Component	Ret. Idx.	Conc. %	
50.103	beta-Sesquiphellandrene	1518	0.07%	
50.446	Cubedol	1524	0.02%	
50.851	alpha-Cadinene	1530	0.03%	
52.298	trans-Nerolidol	1555	0.04%	
52.766	Maaliol	1563	0.07%	
53.191	Spathulenol	1570	0.04%	
54.229	Viridiflorol	1587	0.01%	
55.445	Epicubenol	1608	0.2%	
55.837	gamma-Eudesmol	1615	0.02%	
56.959	alpha-Muurolol	1635	1.18%	
57.693	Cadin-4-en-10-ol	1648	0.05%	

Total Identified Compounds **100.02 %**

