



Sample & Analysis Information

Sample Information

Sample Name: Sweet Orange 10X Essential Oil**Botanical Name:** Citrus sinensis**Lot Number:** 13107**Production Method:** Cold Press**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 2/19/2025**Manufacture Date:** February 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

+84.08

1.46893

0.84573

Ret. Time	Component	Ret. Idx.	Conc. %	
10.990	Nonane	894	0.01%	
12.371	alpha-Thujene	920	0.04%	
12.792	alpha-Pinene	927	0.38%	
15.007	Sabinene	966	0.21%	
15.321	beta-Pinene	972	0.17%	
15.948	Myrcene	983	1.45%	
16.796	Octanal	998	1.36%	
17.034	alpha-Phellandrene	1002	0.03%	
17.181	delta-3-Carene	1004	0.05%	
17.706	alpha-Terpinene	1012	0.02%	
18.200	para-Cymene	1019	0.52%	
18.641	Limonene	1026	79.5%	IFRA
18.695	beta-Phellandrene	1027	0.19%	
18.891	cis-beta-Ocimene	1030	0.01%	
19.580	trans-beta-Ocimene	1040	0.07%	
20.386	gamma-Terpinene	1052	1.3%	
21.151	1-Octanol	1063	0.25%	
22.207	Terpinolene	1079	0.04%	
22.295	trans-Linalool oxide (furanoid)	1081	0.01%	
23.162	Linalool	1094	3.4%	IFRA
23.505	Nonanal	1099	0.43%	
24.683	trans-para-Mentha-2,8-dien-1-ol	1116	0.02%	
25.449	cis-Limonene oxide	1127	0.06%	
25.705	cis-para-Mentha-2,8-dien-1-ol	1130	0.02%	
25.745	trans-Limonene oxide	1131	0.04%	
26.542	Isopulegol	1142	0.06%	
26.775	Citronellal	1146	0.61%	IFRA
27.069	Menthone	1150	0.01%	
27.246	Neoisopulegol	1152	0.03%	
27.688	Isomenthone	1159	0.01%	
28.054	delta-Terpineol	1164	0.01%	
29.777	alpha-Terpineol	1189	1.08%	
30.106	Unidentified	1193	0.02%	
30.572	Decanal	1200	5.96%	
30.836	Octyl acetate	1204	0.15%	
31.400	trans-Carveol	1212	0.02%	
31.763	Nerol	1217	0.03%	
31.914	Citronellol	1220	0.11%	IFRA
32.309	cis-Carveol	1225	0.02%	
32.704	Neral	1231	0.42%	IFRA



GC/MS Report Components

Ret. Time	Component	Ret. Idx.	Conc. %	
33.117	Carvone	1237	0.03%	IFRA
33.530	Geraniol	1243	0.04%	IFRA
34.727	Geranial	1260	0.68%	IFRA
35.070	Undecanol	1265	0.02%	
37.311	Unidentified	1298	0.01%	
40.807	Neryl acetate	1351	0.07%	
40.977	Decanoic acid	1353	0.01%	
41.994	alpha-Copaene	1369	0.03%	
42.874	beta-Elemene	1382	0.01%	
44.169	Dodecanal	1402	0.6%	
44.813	beta-Caryophyllene	1412	0.23%	
45.415	gamma-Elemene	1422	0.01%	
45.657	trans-alpha-Bergamotene	1425	0.02%	
47.067	alpha-Humulene	1448	0.03%	
48.655	Germacrene D	1473	0.03%	
49.572	Unidentified	1488	0.02%	
50.303	beta-Bisabolene	1499	0.01%	
50.912	delta-Cadinene	1510	0.01%	
53.345	Germacrene B	1550	0.01%	

Total Identified Compounds **99.94 %**

TIC
34,666,263

