



Sample & Analysis Information

Sample Information

Sample Name: Tangerine Essential Oil**Botanical Name:** Citrus reticulata**Lot Number:** 13024**Production Method:** Cold Press**Sample Type:** Essential Oil**Country of Origin:** USA**Analysis Date:** 9/10/2024**Date of Distillation:** September 2024

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

+92.80

1.47412

0.84886

Ret. Time	Component	Ret. Idx.	Conc. %	
11.666	alpha-Thujene	924	0.13%	
12.066	alpha-Pinene	931	0.8%	
14.206	Sabinene	971	0.18%	
14.502	beta-Pinene	976	0.26%	
15.131	Myrcene	988	1.88%	
15.973	Octanal	1003	0.26%	
16.178	alpha-Phellandrene	1006	0.04%	
16.320	delta-3-Carene	1008	0.01%	
16.834	alpha-Terpinene	1016	0.05%	
17.324	para-Cymene	1024	0.41%	
17.723	Limonene	1030	91.69%	IFRA
17.775	beta-Phellandrene	1031	0.2%	
18.685	trans-beta-Ocimene	1045	0.07%	
19.463	gamma-Terpinene	1057	2.87%	
20.260	1-Octanol	1069	0.02%	
21.245	Terpinolene	1084	0.12%	
22.192	Linalool	1099	0.2%	IFRA
22.558	Nonanal	1104	0.02%	
24.441	cis-Limonene oxide	1131	0.03%	
24.736	trans-Limonene oxide	1136	0.03%	
28.729	alpha-Terpineol	1194	0.05%	
29.514	Decanal	1205	0.29%	
34.200	Perillaldehyde	1274	0.02%	IFRA
39.696	Neryl acetate	1357	0.02%	
40.803	alpha-Copaene	1374	0.05%	
40.978	Geranyl acetate	1377	0.01%	
41.590	beta-Cubebene	1386	0.02%	
43.028	Dodecanal	1408	0.04%	
45.706	trans-beta-Farnesene	1451	0.02%	
47.428	Germacrene D	1479	0.02%	
48.892	trans,trans-alpha-Farnesene	1503	0.09%	
49.703	delta-Cadinene	1516	0.05%	
51.476	alpha-Elemol	1546	0.01%	
62.797	alpha-Sinensal	1747	0.02%	

Total Identified Compounds **99.98 %**

