



Sample & Analysis Information

Sample Information

Sample Name: Pink Grapefruit EO CP**Botanical Name:** Citrus paradisi**Lot Number:** 13024**Production Method:** Cold Press**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 3/31/2025**Manufacture Date:** July 2024

GC/MS

Inst. ID: Shimadzu GCMS-QP2010Ultra**Injection Type:** Split**Split Ratio:** 24.4**Column Type:** ZB-5**Injection Volume:** 0.1 μ L**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

+94.92

1.47551

0.85314

Ret. Time	Component	Ret. Idx.	Conc. %	
12.099	alpha-Pinene	932	0.61%	
14.240	Sabinene	971	0.53%	
14.537	beta-Pinene	977	0.11%	
15.167	Myrcene	988	2.1%	
16.008	Octanal	1003	0.44%	
16.216	alpha-Phellandrene	1006	0.03%	
17.370	para-Cymene	1024	0.04%	
17.805	Limonene	1031	93.2%	IFRA
17.855	beta-Phellandrene	1032	0.16%	
18.717	trans-beta-Ocimene	1045	0.05%	
19.498	gamma-Terpinene	1057	0.01%	
20.285	Octanol	1069	0.05%	
22.230	Linalool	1099	0.07%	IFRA
22.591	Nonanal	1104	0.05%	
23.155	trans-4,8-Dimethyl-nona-1,3,7-triene	1113	0.01%	
23.724	trans-para-Mentha-2,8-dienol	1121	0.02%	
24.476	cis-Limonene oxide	1132	0.04%	
24.770	trans-Limonene oxide	1136	0.04%	
25.816	Citronellal	1151	0.03%	IFRA
28.762	alpha-Terpineol	1194	0.08%	
29.550	Decanal	1206	0.24%	
29.836	Octyl acetate	1210	0.03%	
30.382	trans-Carveol	1218	0.01%	
31.288	cis-Carveol	1231	0.01%	
31.688	Neral	1237	0.03%	IFRA
32.083	Carvone	1243	0.02%	IFRA
33.701	Geranial	1267	0.07%	IFRA
34.221	Perillaldehyde	1275	0.01%	IFRA
36.247	Unidentified	1305	0.01%	
39.716	Neryl acetate	1357	0%	
40.830	alpha-Copaene	1374	0.1%	
41.004	Geranyl acetate	1377	0.02%	
41.619	beta-Cubebene	1386	0.08%	
41.729	beta-Elemene	1388	0.02%	
43.051	Dodecanal	1409	0.03%	
43.623	beta-Caryophyllene	1418	0.58%	
45.740	trans-beta-Farnesene	1452	0.02%	
45.865	alpha-Humulene	1454	0.03%	
47.454	Germacrene D	1479	0.05%	
48.346	Bicyclogermacrene	1494	0.01%	



GC/MS Report Components

Ret. Time	Component	Ret. Idx.	Conc. %	
48.549	alpha-Muurolene	1497	0.01%	
49.539	Cubebol	1514	0.01%	
49.727	delta-Cadinene	1517	0.1%	
51.497	Elemol	1547	0.03%	
53.164	Spathulenol	1575	0.02%	
53.469	Caryophyllene oxide	1580	0.01%	
59.364	alpha-Bisabolol	1684	0.01%	IFRA
59.795	beta-Sinensal	1691	0.02%	
65.588	Nootkatone	1799	0.09%	IFRA
77.540	Bergaptene	2043	0.01%	IFRA
81.041	Ostole	2119	0.04%	
85.097	Unidentified furanocoumarin	2210	0.08%	
85.514	Unidentified	2220	0.18%	
101.046	Aurapten	2609	0.31%	
105.776	Unidentified	2740	0.02%	

Total Identified Compounds **99.69 %**

