

Sample Information

Sample Name: Pink Grapefruit
Botanical Name: Citrus paradisi
Lot Number: 12856
Production Method: Cold Press

Sample Type: EO - Single
Country of Origin: USA
Analysis Date: 10/9/2024
Date of Distillation: October 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	METHOD	RESULTS
Optical Rotation @20°C	USP[781]	+95.28
Refractive Index @20°C	USP[831]	1.47530
Specific Gravity @20°C	USP[841]	0.85232

GC/MS Report
Components

Ret. Time	Component	Ret. Idx.	Conc. %	
12.233	alpha-Pinene	930	0.7%	
14.390	Sabinene	970	0.51%	
14.686	beta-Pinene	975	0.12%	
15.326	Myrcene	987	2.35%	
15.485	Unidentified	990	0.03%	
16.158	Octanal	1002	0.41%	
16.380	alpha-Phellandrene	1005	0.05%	
17.538	para-Cymene	1023	0.05%	
17.978	Limonene	1029	92.82%	IFRA
18.030	beta-Phellandrene	1030	0.01%	
18.897	trans-beta-Ocimene	1044	0.05%	
19.686	gamma-Terpinene	1056	0.01%	
20.473	Octanol	1068	0.04%	
22.424	Linalool	1098	0.06%	IFRA
22.784	Nonanal	1103	0.05%	
23.206	Phenylethyl alcohol	1109	0.07%	
23.922	trans-para-Mentha-2,8-dien-1-ol	1119	0.02%	
24.682	cis-Limonene oxide	1130	0.05%	
24.978	trans-Limonene oxide	1135	0.06%	
26.020	Citronellal	1150	0.04%	IFRA
27.840	Unidentified	1176	0.01%	
28.969	alpha-Terpineol	1193	0.11%	
29.326	Unidentified	1198	0.01%	
29.757	Decanal	1204	0.22%	
30.049	Octyl acetate	1208	0.05%	
30.603	trans-Carveol	1217	0.02%	
31.499	cis-Carveol	1230	0.01%	
31.907	Neral	1236	0.01%	IFRA
32.295	Carvone	1241	0.02%	IFRA
33.925	Geranial	1265	0.04%	IFRA
34.450	Perillaldehyde	1273	0.01%	IFRA
39.171	Unidentified	1344	0.02%	
41.085	alpha-Copaene	1373	0.09%	
41.241	Geranyl acetate	1375	0.02%	
41.878	beta-Cubebene	1385	0.07%	
41.978	beta-Elemene	1387	0.02%	
43.286	Dodecanal	1407	0.02%	
43.880	beta-Caryophyllene	1417	0.6%	
45.981	trans-beta-Farnesene	1450	0.01%	
46.121	alpha-Humulene	1452	0.03%	

GC/MS Report
Components

Ret. Time	Component	Ret. Idx.	Conc. %	
47.716	Germacrene D	1478	0.05%	
48.605	Bicyclogermacrene	1492	0.01%	
48.809	Unidentified	1495	0.01%	
49.991	delta-Cadinene	1515	0.08%	
51.750	Elemol	1545	0.02%	
53.430	Unidentified	1573	0.01%	
60.086	Unidentified	1690	0.01%	
64.000	Benzyl benzoate	1763	0.01%	IFRA
65.877	Nootkatone	1798	0.07%	IFRA
77.850	Unidentified	2041	0.01%	
81.338	Osthole	2116	0.03%	
84.498	Unidentified	2187	0.04%	
85.416	Unidentified	2208	0.11%	
85.828	Unidentified	2218	0.07%	
87.409	Unidentified	2255	0.01%	
101.383	Aurapten	2607	0.55%	
106.145	Unidentified	2739	0.01%	
107.487	Unidentified	2777	0.01%	

Total Identified Compounds **99.64 %**

GC/MS Report: Chromatogram

