

Sample Information

Sample Name: Lime EO Distilled
Botanical Name: Citrus aurantifolia
Lot Number: MEX27-XK
Production Method: Steam distilled

Sample Type: EO - Single
Country of Origin: Mexico
Analysis Date: 6/27/2024
Date of Distillation: June 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]	+38.40
Refractive Index @20°C	USP[831]	1.47603
Specific Gravity @20°C	USP[841]	0.85939

Ret. Time	Component	Ret. Idx.	Conc. %	
5.739	Limediene isomer	759	0.01%	
5.833	Limediene isomer	763	0.07%	
6.205	Limediene isomer	781	0.01%	
6.612	Octane	800	0%	
10.366	Nonane	900	0.03%	
10.648	Bornylene	905	0.02%	
11.538	Tricyclene	922	0.02%	
11.686	alpha-Thujene	924	0.03%	
12.089	alpha-Pinene	932	1.03%	
12.883	alpha-Fenchene	946	0.17%	
12.976	Camphene	948	0.42%	
14.054	Bois de Rose oxide	968	0.19%	
14.229	Sabinene	971	0.24%	
14.529	beta-Pinene	977	2.38%	
15.010	para-Menth-3-ene	986	0.01%	
15.154	Myrcene	988	1.22%	
15.506	Unidentified	995	0.03%	
16.057	Pseudolimonene	1004	0.05%	
16.124	Unidentified	1005	0.04%	
16.203	alpha-Phellandrene	1006	0.31%	
16.350	delta-3-Carene	1009	0.02%	
16.716	1,4-Cineole	1014	1.73%	
16.859	alpha-Terpinene	1016	2.33%	
17.342	para-Cymene	1024	2.62%	
17.704	Limonene	1029	47.45%	IFRA
17.776	beta-Phellandrene	1031	0.04%	
17.837	1,8-Cineole	1031	0.97%	
18.034	cis-beta-Ocimene	1035	0.13%	
18.569	2,2-Dimethyl-5-(1-methylpropenyl) tetrahydrofuran	1043	0.13%	
18.705	trans-beta-Ocimene	1045	0.37%	
19.510	gamma-Terpinene	1057	13.21%	
20.331	Unidentified	1070	0.03%	
20.385	Unidentified	1071	0.02%	
21.296	Terpinolene	1085	11.05%	
21.490	Fenchone	1088	0.01%	
21.598	para-Cymenene	1089	0.26%	
22.226	Linalool	1099	0.12%	IFRA
23.125	1,3,8-para-Menthatriene	1112	0.03%	
23.541	endo-Fenchol	1118	0.34%	
24.163	allo-Ocimene	1127	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %	
24.671	Terpin-3-en-1-ol	1135	0.34%	
24.989	Unidentified	1139	0.03%	
25.152	Epoxyterpinolene	1142	0.08%	
25.605	cis-beta-Terpineol	1148	0.25%	
25.893	alpha-Terpineol	1153	0.01%	
26.569	Isoborneol	1162	0.03%	
26.860	trans-beta-Terpineol	1167	0.05%	
27.046	delta-Terpineol	1169	0.03%	
27.154	Borneol	1171	0.6%	
27.441	Unidentified	1175	0.02%	
27.757	Terpinen-4-ol	1180	0.31%	
28.191	para-Cymen-8-ol	1186	0.07%	
28.780	alpha-Terpineol	1195	6.11%	
29.088	gamma-Terpineol	1199	0.36%	
29.557	Decanal	1206	0.02%	
31.686	Neral	1237	0.11%	IFRA
32.521	Unidentified	1250	0.01%	
33.700	Geranial	1267	0.16%	IFRA
34.118	cis-Ascaridol glycol	1273	0.01%	
34.446	Unidentified	1278	0.01%	
35.301	trans-Ascaridol glycol	1290	0.01%	
37.268	Unidentified	1320	0.02%	
38.195	delta-Elemene	1334	0.04%	
39.725	Neryl acetate	1358	0.11%	
40.825	Unidentified	1374	0%	
41.009	Geranyl acetate	1377	0.06%	
41.727	beta-Elemene	1388	0.03%	
43.235	cis-alpha-Bergamotene	1412	0.04%	
43.627	beta-Caryophyllene	1418	0.64%	
44.255	gamma-Elemene	1428	0.02%	
44.490	trans-alpha-Bergamotene	1432	0.81%	
44.692	beta-Duprezianene	1435	0.02%	
44.956	Unidentified	1439	0.01%	
45.734	trans-beta-Farnesene	1452	0.04%	
45.867	alpha-Humulene	1454	0.05%	
46.115	epi-beta-Santalene	1458	0.03%	
46.981	Selina-4,11-diene	1472	0.06%	
47.260	Unidentified	1476	0.01%	
47.343	Unidentified	1478	0.01%	
47.657	Unidentified	1483	0.07%	

Ret. Time	Component	Ret. Idx.	Conc. %	
47.836	delta-Selinene	1486	0.14%	
47.949	beta-Selinene	1487	0.02%	
48.385	alpha-Selinene	1494	0.05%	
48.566	Unidentified	1497	0.01%	
48.693	cis-alpha-Bisabolene	1499	0.07%	
48.921	trans,trans-alpha-Farnesene	1503	0.35%	
49.126	beta-Bisabolene	1507	1.14%	
49.295	cis-gamma-Bisabolene	1509	0.04%	
49.465	Unidentified	1512	0%	
49.741	delta-Cadinene	1517	0.03%	
50.063	Unidentified	1522	0.01%	
50.246	trans-gamma-Bisabolene	1525	0.01%	
50.571	trans-Cadina-1(6),4-diene	1531	0.12%	
50.834	Selina-4(15),7(11)-diene	1535	0.02%	
51.084	Selina-3,7(11)-diene	1540	0.06%	
52.128	Germacrene B	1557	0.01%	
53.097	Caryophyllene alcohol	1574	0.03%	
56.355	gamma-Eudesmol	1630	0.01%	
59.366	Unidentified	1684	0.01%	
59.496	alpha-Bisabolol	1686	0.02%	IFRA

Total Identified Compounds **99.65 %**

GC/MS Report: Chromatogram

