



Essential Oil University

GC/MS Report

Item	Lot
Mandarin EO CP Red <i>Citrus reticulata blanco</i>	7AA
Date	Analyst
10/16/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Mandarin EO CP Red, meets the expected chemical profile for authentic essential oil of *Citrus reticulata blanco*. No contamination or adulteration was detected. The results provided in this GCMS quality analysis reflect the chemical composition of the oil and lot referenced above on the date of analysis.



Sample Information

Company: Revive**Sample Name:** Mandarin EO CP Red**Botanical Name:** Citrus reticulata blanco**Lot Number:** 7AA**Production Method:** Cold Press**Sample Type:** EO - Single**Country of Origin:** Italy**Analysis Date:** 10/16/2025**Manufacture Date:** October 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

+79.68

1.47361

0.84817



Ret. Time	Component	Ret. Idx.	Conc. %	
12.254	alpha-Thujene	918	0.48%	
12.670	alpha-Pinene	925	1.71%	ALLERGEN
13.586	Camphene	941	0.01%	
14.867	Sabinene	964	0.31%	
15.177	beta-Pinene	969	0.97%	ALLERGEN
15.803	Myrcene	980	2.36%	PROP. 65
16.671	Octanal	996	0.04%	
16.723	Pseudolimonene	996	0.05%	
16.878	alpha-Phellandrene	999	0.04%	
17.024	delta-3-Carene	1002	0.05%	
17.546	alpha-Terpinene	1009	0.13%	ALLERGEN
18.036	para-Cymene	1017	1.56%	
18.459	Limonene	1023	73.41%	ALLERGEN IFRA
18.515	beta-Phellandrene	1024	0.19%	
18.580	1,8-Cineole	1025	0.03%	
18.728	cis-beta-Ocimene	1027	0.01%	
19.420	trans-beta-Ocimene	1037	0.07%	
20.255	gamma-Terpinene	1050	16.89%	
21.030	cis-Linalool oxide (furanoid)	1062	0.06%	
21.151	Pinol	1063	0.02%	
22.030	Terpinolene	1077	0.44%	ALLERGEN
22.252	Fenchone	1080	0.05%	
22.410	6,7-Epoxymyrcene	1082	0.01%	
22.978	Linalool	1091	0.09%	ALLERGEN IFRA
23.085	cis-Sabinene hydrate	1093	0.01%	
23.358	Nonanal	1097	0.01%	
24.506	trans-para-Mentha-2,8-dienol	1113	0.01%	
25.263	cis-Limonene oxide	1124	0.08%	
25.560	trans-Limonene oxide	1128	0.09%	
25.956	Epoxyterpinolene	1134	0.05%	
27.365	Unidentified	1154	0.03%	
27.632	Unidentified	1158	0.02%	
28.583	Terpinen-4-ol	1172	0.03%	
29.580	alpha-Terpineol	1186	0.09%	ALLERGEN
29.901	trans-para-Mentha-2,8-dienol	1190	0.02%	
30.366	Decanal	1197	0.02%	
31.210	trans-Carveol	1209	0.01%	
31.727	Citronellol	1217	0.01%	ALLERGEN IFRA
32.115	cis-Carveol	1222	0.01%	
36.018	Thymol	1279	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %	
39.685	8-para-Menthadien-1,2-diol	1334	0.04%	
43.653	Dimethylantranilate	1394	0.28%	IFRA
44.580	beta-Caryophyllene	1408	0.05%	ALLERGEN
46.831	alpha-Humulene	1444	0.01%	
49.353	alpha-Selinene	1484	0.02%	
49.854	trans,trans-alpha-Farnesene	1492	0.05%	
50.707	Unidentified	1506	0.02%	
54.465	Unidentified	1569	0.01%	
63.801	alpha-Sinensal	1734	0.03%	

Total Identified Compounds **99.92 %**



TIC
37,120,251

