



Essential Oil University

GC/MS Report

Item	Lot
Mandarin EO CP Yellow <i>Citrus reticulata blanco</i>	8D
Date	Analyst
10/13/2025	Dr. Robert S. Pappas

© Copyright 2025 by Essential Oil University. All rights reserved. Any publishing, copying, use, dissemination, or distribution of this report, including online, without the express written permission of Essential Oil University is strictly prohibited.

The analysis of this batch sample, Mandarin EO CP Yellow, 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 Yellow
Botanical Name: Citrus reticulata blanco
Lot Number: 8D
Production Method: Cold Press

Sample Type: EO - Single
Country of Origin: Italy
Analysis Date: 10/13/2025
Manufacture Date: September 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	METHOD	RESULTS
Optical Rotation @20°C	USP[781]	+79.24
Refractive Index @20°C	USP[831]	1.47336
Specific Gravity @20°C	USP[841]	0.84742



Ret. Time	Component	Ret. Idx.	Conc. %	
4.764	Heptane	698	0%	
12.419	alpha-Thujene	923	0.18%	
12.844	alpha-Pinene	931	2.08%	ALLERGEN
13.774	Camphene	947	0.01%	
15.064	Sabinene	970	0.28%	
15.380	beta-Pinene	976	1.49%	ALLERGEN
15.999	Myrcene	987	1.82%	PROP. 65
16.875	Octanal	1002	0.11%	
17.096	alpha-Phellandrene	1005	0.04%	
17.241	delta-3-Carene	1007	0.13%	
17.755	alpha-Terpinene	1015	0.07%	ALLERGEN
18.253	para-Cymene	1023	0.75%	
18.653	Limonene	1029	73.51%	ALLERGEN IFRA
18.722	beta-Phellandrene	1030	0.17%	
18.790	1,8-Cineole	1031	0.02%	
19.641	trans-beta-Ocimene	1043	0.03%	
20.488	gamma-Terpinene	1056	18.43%	
21.279	cis-Linalool oxide (furanoid)	1068	0.06%	
21.404	Pinol	1070	0.03%	
22.283	Terpinolene	1083	0.17%	ALLERGEN
22.533	Fenchone	1087	0.03%	
23.238	Linalool	1098	0.05%	ALLERGEN IFRA
25.547	cis-Limonene oxide	1131	0.04%	
25.842	trans-Limonene oxide	1135	0.05%	
26.238	Epoxyterpinolene	1141	0.01%	
27.648	Unidentified	1161	0.01%	
27.914	Unidentified	1165	0.01%	
28.877	Terpinen-4-ol	1179	0.01%	
29.885	alpha-Terpineol	1193	0.04%	ALLERGEN
30.653	Decanal	1204	0.05%	
31.499	trans-Carveol	1217	0.01%	
40.008	Unidentified	1342	0.02%	
43.962	Methyl N-methyl anthranilate	1403	0.27%	IFRA
50.125	trans,trans-alpha-Farnesene	1501	0.02%	
64.083	alpha-Sinensal	1745	0.01%	

Total Identified Compounds **99.97 %**



TIC
21,206,816

