



Essential Oil University

GC/MS Report

Item	Lot
Clementine EO CP <i>Citrus clementina</i>	8L
Date	Analyst
6/4/2025	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, Clementine EO CP, meets the expected chemical profile for authentic essential oil of *Citrus clementina*. 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: Clementine EO CP

Botanical Name: Citrus clementina

Lot Number: 8L

Production Method: Cold Press

Sample Type: EO - Single

Country of Origin: Italy; USA

Analysis Date: 6/4/2025

Manufacture Date: February 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

+96.80

1.47380

0.84809



Ret. Time	Component	Ret. Idx.	Conc. %	
11.620	alpha-Thujene	923	0.02%	
12.018	alpha-Pinene	930	0.63%	
14.152	Sabinene	970	0.36%	
14.448	beta-Pinene	975	0.1%	
15.077	Myrcene	987	1.92%	
15.923	Octanal	1002	0.1%	
16.121	alpha-Phellandrene	1005	0.04%	
16.264	delta-3-Carene	1007	0.08%	
16.777	alpha-Terpinene	1015	0.01%	
17.268	para-Cymene	1023	0.06%	
17.679	Limonene	1029	95.17%	IFRA
17.730	beta-Phellandrene	1030	0.2%	
17.954	cis-beta-Ocimene	1033	0.01%	
18.627	trans-beta-Ocimene	1044	0.04%	
19.401	gamma-Terpinene	1056	0.27%	
20.178	Unidentified	1068	0.01%	
21.178	Terpinolene	1083	0.03%	
22.128	Linalool	1098	0.18%	IFRA
22.494	Nonanal	1103	0.01%	
23.621	trans-para-Mentha-2,8-dienol	1119	0.01%	
24.610	Unidentified	1134	0.01%	
24.664	cis-Limonene oxide	1135	0.01%	
25.713	Citronellal	1150	0.03%	IFRA
28.657	alpha-Terpineol	1193	0.03%	
29.444	Decanal	1204	0.18%	
30.279	trans-Carveol	1217	0.01%	
30.808	Unidentified	1224	0.01%	
30.959	Unidentified	1227	0%	
31.583	Neral	1236	0.01%	IFRA
31.978	Carvone	1242	0.03%	IFRA
33.617	Geranial	1266	0.02%	IFRA
34.124	Perillaldehyde	1273	0.02%	IFRA
38.719	Unidentified	1342	0.03%	
40.721	alpha-Copaene	1373	0.05%	
41.509	beta-Cubebene	1385	0.03%	
41.614	beta-Elemene	1386	0.02%	
42.952	Dodecanal	1407	0.04%	
43.502	beta-Caryophyllene	1416	0.02%	
44.160	beta-Copaene	1427	0.01%	
45.639	Unidentified	1450	0.01%	

Ret. Time	Component	Ret. Idx.	Conc. %
45.755	Unidentified	1452	0.01%
47.342	Germacrene D	1478	0.03%
48.052	Valencene	1489	0.01%
48.229	Unidentified	1492	0.01%
48.809	trans,trans-alpha-Farnesene	1501	0.01%
49.615	delta-Cadinene	1515	0.05%
51.389	Elemol	1545	0.01%
51.996	Unidentified	1555	0.01%
53.035	Unidentified	1573	0.01%
59.699	beta-Sinensal	1690	0.01%
62.712	alpha-Sinensal	1746	0.05%

Total Identified Compounds **99.92 %**

