



Essential Oil University

GC/MS Report

Item	Lot
Cilantro (Coriander Leaf) EO <i>Coriandrum sativum</i>	1L
Date	Analyst
7/11/2025	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, Cilantro (Coriander Leaf) EO, meets the expected chemical profile for authentic essential oil of *Coriandrum sativum*. 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:** Cilantro (Coriander Leaf) EO**Botanical Name:** Coriandrum sativum**Lot Number:** 1L**Production Method:** Steam Distilled**Sample Type:** EO - Single**Country of Origin:** USA**Analysis Date:** 7/11/2025**Manufacture Date:** January 2024

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

-3.64

1.46138

0.87013



Ret. Time	Component	Ret. Idx.	Conc. %	
4.741	Heptane	695	0.01%	
6.997	Octane	792	0.01%	
8.987	Hex-(3Z)-enol	844	0.04%	
9.386	Hex-2(E)-enol	854	0.04%	
9.517	Hexanol	858	0.04%	
10.945	Nonane	893	0.55%	
11.061	Heptanal	896	0.02%	
12.172	Tricyclene	916	0%	
12.323	alpha-Thujene	919	0.01%	
12.741	alpha-Pinene	926	2.06%	
13.662	Camphene	943	0.07%	
14.945	Sabinene	965	0.05%	
15.256	beta-Pinene	971	0.1%	
15.572	Camphene isomer	976	0.01%	
15.887	Myrcene	982	0.07%	
16.552	Decane	993	0.05%	
16.726	Octanal	997	0.94%	
16.790	Pseudolimonene	998	0.09%	
16.880	Unidentified	999	0.02%	
17.784	ortho-Cymene	1013	0.01%	
18.113	para-Cymene	1018	2.01%	
18.418	Limonene	1022	0.28%	IFRA
18.521	beta-Phellandrene	1024	0%	
18.620	1,8-Cineole	1025	0.03%	
18.815	cis-beta-Ocimene	1028	0.02%	
19.515	trans-beta-Ocimene	1039	0.01%	
20.309	gamma-Terpinene	1051	0.37%	
20.621	2-Methyl octanal	1056	0.01%	
21.121	cis-Linalool oxide (furanoid)	1063	0.33%	
22.150	Terpinolene	1078	0.03%	
22.201	trans-Linalool oxide (furanoid)	1079	0.3%	
22.454	Unidentified	1083	0.05%	
22.570	Unidentified	1085	0.01%	
23.213	Linalool	1094	36.45%	IFRA
23.458	Nonanal	1098	0.98%	
24.450	endo-Fenchol	1112	0.01%	
26.368	Camphor	1140	0.42%	
27.257	Non-(2E)-enal	1153	0.02%	
27.681	Unidentified	1159	0.01%	
27.757	Non-(2E)-enol	1160	0.03%	



Ret. Time	Component	Ret. Idx.	Conc. %	
27.916	cis-Linalool oxide (pyranoid)	1162	0.02%	
28.048	1-Nonanol	1164	0.05%	
28.075	Borneol	1164	0.04%	
28.238	trans-Linalool oxide (furanoid)	1167	0.02%	
28.697	Terpinen-4-ol	1173	0.05%	
29.101	Dill ether	1179	0.02%	
29.187	Unidentified	1180	0.05%	
29.595	Dec-(4Z)-enal	1186	0.07%	
29.704	alpha-Terpineol	1188	0.06%	
29.857	Dec-(4E)-enal	1190	0.15%	
30.485	Decanal	1199	5.38%	
32.633	Neral	1230	0.02%	IFRA
33.334	(Z)-2-Decenal	1240	0.15%	
33.456	Geraniol	1242	0.21%	IFRA
33.703	Unidentified	1246	0.01%	
34.363	Dec-(2E)-enal	1255	13.19%	
34.773	Dec-(2E)-enol	1261	11.09%	
35.008	1-Decanol	1265	3.57%	
35.826	Unidentified	1276	0.01%	
36.401	Unidentified	1285	0.01%	
36.753	Unidentified	1290	0.02%	
37.410	Undecenal	1299	0.22%	
37.823	Unidentified	1306	0.04%	
38.096	Deca-(2E,4E)-dienal	1310	0.01%	
38.567	Unidentified	1317	0.09%	
38.874	Unidentified	1322	0.05%	
40.818	Undec-(2Z)-enal	1351	1.14%	
40.910	Decanoic acid	1352	0.08%	
41.123	Undec-(8Z)-enal	1356	0.72%	
41.300	Unidentified	1358	0.02%	
41.427	Undec-(2E)-enol	1360	0.26%	
41.708	Undecanol	1364	0.07%	
41.890	alpha-Copaene	1367	0.01%	
42.003	Geranyl acetate	1369	0.09%	
43.158	Dodec-(4Z)-enal	1386	0.05%	
43.270	Unidentified	1388	0.05%	
43.383	Dodec-(4E)-enal	1390	0.07%	
44.077	Dodecanal	1400	2.74%	
44.708	beta-Caryophyllene	1410	0.03%	
46.702	Unidentified	1442	0.04%	



Ret. Time	Component	Ret. Idx.	Conc. %	
47.454	Unidentified	1454	0.05%	
47.680	trans-2-Dodecenal	1458	3.72%	
47.875	trans-2-Dodecen-1-ol	1461	0.57%	
48.125	Dodecanol	1465	0.06%	
49.162	Unidentified	1481	0.02%	
50.407	Tridecanal	1501	0.02%	
50.811	delta-Cadinene	1508	0.01%	
53.743	Unidentified	1557	0.25%	
53.863	Tridec-(2E)-enal	1559	0.09%	
54.589	Caryophyllene oxide	1571	0.01%	
55.576	Unidentified	1588	0.02%	
55.750	Unidentified	1591	0.03%	
56.428	Tetradecanal	1602	0.12%	
58.089	Unidentified	1632	0.03%	
58.344	Unidentified	1636	0.02%	
58.838	Tetradec-(2Z)-enal	1645	0.02%	
59.766	Tetradec-(2E)-enal	1661	1.95%	
60.443	alpha-Bisabolol	1673	0.05%	IFRA
62.348	3-Isobutylidene phthalide	1707	0.03%	
64.485	Unidentified	1747	0.01%	
64.602	Unidentified	1749	0.01%	
65.144	Unidentified	1759	0.01%	
65.353	Tetradecenal analogue	1763	0.17%	
68.702	Unidentified	1826	0.06%	
70.674	Unidentified	1865	0.04%	
71.829	Unidentified	1887	0.01%	
74.076	meta-Camphorene	1933	0.05%	
74.393	Unidentified	1939	0.02%	
75.807	para-Camphorene	1968	0.02%	
76.423	Unidentified	1981	0.03%	
77.456	Unidentified	2002	0.02%	
81.015	Unidentified	2078	0.02%	
82.436	Unidentified	2109	0.02%	
82.676	Unidentified	2114	0.53%	
83.202	Unidentified	2126	0.02%	
83.583	Unidentified	2135	0.87%	
83.948	Unidentified	2143	1.86%	
84.541	Unidentified	2156	0.04%	
84.836	Unidentified	2163	0.01%	
85.115	Unidentified	2169	0.16%	



Ret. Time	Component	Ret. Idx.	Conc. %	
85.395	Unidentified	2175	0.23%	
85.482	Unidentified	2177	0.74%	
85.655	Unidentified	2181	0.17%	
86.477	Unidentified	2199	0.07%	
86.634	Unidentified	2203	0.08%	
86.775	Unidentified	2206	0.05%	
87.225	Unidentified	2217	0.04%	
87.935	Unidentified	2233	0.06%	
88.211	Unidentified	2240	0.13%	
89.093	Unidentified	2260	0.01%	
89.677	Unidentified	2274	0.08%	
91.568	Unidentified	2319	0.12%	
91.802	Unidentified	2324	0.02%	
91.951	Unidentified	2328	0.13%	
92.300	Unidentified	2336	0.45%	
92.515	Unidentified	2342	0.06%	
93.074	Unidentified	2355	0.03%	
93.763	Unidentified	2372	0.13%	
93.904	Unidentified	2375	0.39%	
94.918	Unidentified	2400	0.02%	
95.094	Unidentified	2404	0.05%	
96.266	Unidentified	2434	0.02%	
99.785	Unidentified	2524	0.09%	
100.116	Unidentified	2532	0.16%	
100.766	Unidentified	2550	0.02%	
101.506	Unidentified	2569	0.04%	
101.776	Unidentified	2576	0.02%	
107.747	Unidentified	2739	0.02%	
108.480	Unidentified	2760	0.02%	

Total Identified Compounds **91.94 %**

