



Essential Oil University

GC/MS Report

Item	Lot
Cumin EO <i>Cuminum cyminum</i>	6D
Date	Analyst
2/10/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Cumin EO, meets the expected chemical profile for authentic essential oil of *Cuminum cyminum*. 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:** Cumin EO**Botanical Name:** Cuminum cyminum**Lot Number:** 6D**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Egypt**Analysis Date:** 2/10/2025**Manufacture Date:** January 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

+2.32

1.50849

0.92948



Ret. Time	Component	Ret. Idx.	Conc. %	
10.324	Nonane	899	0%	
11.500	Cumene	921	0.01%	
11.633	alpha-Thujene	923	0.17%	
11.810	1-Isopropylcyclohex-1-ene	927	0.07%	
12.031	alpha-Pinene	931	0.5%	
12.917	Camphene	947	0.01%	
13.833	Unidentified	964	0.01%	
14.165	Sabinene	970	0.26%	
14.476	beta-Pinene	976	9.81%	
15.088	Myrcene	987	0.37%	
15.296	Unidentified	991	0.01%	
16.132	alpha-Phellandrene	1005	0.19%	
16.273	delta-3-Carene	1007	0.02%	
16.784	alpha-Terpinene	1015	0.09%	
16.946	ortho-Cymene	1018	0.02%	
17.286	para-Cymene	1023	11.7%	
17.556	Limonene	1027	0.2%	IFRA
17.658	beta-Phellandrene	1029	0.1%	
17.730	1,8-Cineole	1030	0.08%	
18.635	trans-beta-Ocimene	1044	0.05%	
19.452	gamma-Terpinene	1056	19.1%	
20.188	trans-Sabinene hydrate	1068	0.04%	
20.309	Pinol	1070	0.01%	
21.194	Terpinolene	1083	0.04%	
21.407	Fenchone	1086	0.05%	
22.146	Linalool	1098	0.04%	IFRA
22.216	cis-Sabinene hydrate	1099	0.02%	
24.920	trans-Pinocarveol	1138	0.02%	
26.727	Unidentified	1165	0.04%	
27.666	Terpinen-4-ol	1178	0.14%	
28.108	para-Cymen-8-ol	1185	0.02%	
28.710	para-Menth-3-en-7-al	1194	0.53%	
29.479	Decanal	1205	0.01%	
30.470	2-Methyl-3-phenylpropanal	1219	0.04%	
30.712	4-Isopropyl phenol	1223	0.03%	
32.061	Cuminal	1243	44.88%	IFRA
33.272	Dec-(2E)-enal	1261	0.03%	
33.672	Unidentified	1266	0.02%	
34.281	Phellandral	1275	0.11%	
34.728	Bornyl acetate	1282	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
34.896	para-Mentha-1,3-dien-7-al	1284	6%	
35.187	para-Mentha-1,4-dien-7-al	1289	4.51%	
35.649	Carvacrol	1296	0.02%	
37.660	para-Mentha-1,4-dien-7-ol	1326	0.09%	
38.215	Unidentified	1335	0.02%	
38.287	Unidentified	1336	0.02%	
40.930	Daucene	1376	0.04%	
41.128	Unidentified	1379	0.01%	
42.800	Unidentified	1405	0.01%	
43.311	Unidentified	1413	0.02%	
43.515	beta-Caryophyllene	1416	0.04%	
45.640	trans-beta-Farnesene	1450	0.02%	
46.804	Unidentified	1469	0.01%	
46.977	beta-Acoradiene	1472	0.13%	
48.557	Isodaucene	1497	0.02%	
48.809	Unidentified	1501	0.01%	
49.026	beta-Bisabolene	1505	0.01%	
53.367	Caryophyllene oxide	1578	0.02%	
54.587	Carotol	1599	0.15%	

Total Identified Compounds **99.82 %**

