



Essential Oil University

GC/MS Report

Item	Lot
Oregano EO <i>Origanum vulgare</i>	4E
Date	Analyst
11/13/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Oregano EO, meets the expected chemical profile for authentic essential oil of *Origanum vulgare*. 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:** Oregano EO**Botanical Name:** Origanum vulgare**Lot Number:** 4E**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Turkey**Analysis Date:** 11/13/2025**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

-.76

1.51255

0.95288



Ret. Time	Component	Ret. Idx.	Conc. %	
4.195	3-Methylbutanal	634	0.01%	
6.357	Methyl 2-methylbutyrate	769	0.01%	
12.370	alpha-Thujene	923	0.54%	
12.793	alpha-Pinene	930	1.47%	ALLERGEN
13.722	Camphene	946	0.04%	
15.356	1-Octen-3-ol	975	0.03%	
15.943	Myrcene	986	0.89%	PROP. 65
16.186	Unidentified	990	0.02%	
16.890	Pseudolimonene	1002	0.04%	
17.038	alpha-Phellandrene	1004	0.06%	
17.184	delta-3-Carene	1006	0.02%	
17.697	alpha-Terpinene	1014	1.6%	ALLERGEN
17.852	ortho-Cymene	1016	0.02%	
18.199	para-Cymene	1022	7.84%	
18.335	Unidentified	1024	0.01%	
18.486	Limonene	1026	0.14%	ALLERGEN IFRA
18.601	beta-Phellandrene	1028	0.03%	
18.695	1,8-Cineole	1029	0.42%	
18.843	cis-beta-Ocimene	1031	0.01%	
19.579	trans-beta-Ocimene	1042	0.01%	
20.406	gamma-Terpinene	1055	6.18%	
21.228	trans-Linalool oxide (furanoid)	1067	0.02%	
22.224	Terpinolene	1082	0.03%	ALLERGEN
22.470	Fenchone	1086	0%	
22.551	para-Cymenene	1087	0.02%	
23.180	Linalool	1097	1.51%	ALLERGEN IFRA
23.407	Hotrienol	1100	0.02%	
26.526	Camphor	1145	0.01%	ALLERGEN
28.232	Borneol	1169	0.25%	
28.825	Terpinen-4-ol	1178	1.3%	
29.261	para-Cymen-8-ol	1184	0.01%	
29.853	alpha-Terpineol	1193	0.08%	ALLERGEN
32.146	Thymol methyl ether	1226	0.01%	
32.785	Carvacryl methyl ether	1235	0.03%	
33.268	Carvone	1242	0.03%	ALLERGEN IFRA
35.664	Thymol isomer	1277	0.01%	
36.049	trans-Anethole	1283	0.03%	ALLERGEN
36.281	Thymol	1286	3.68%	
37.024	Carvacrol	1297	69.41%	
37.320	Unidentified	1302	0%	



Ret. Time	Component	Ret. Idx.	Conc. %	
37.903	Unidentified	1310	0.05%	
38.429	Unidentified	1318	0.02%	
40.358	Eugenol	1348	0.03%	ALLERGEN IFRA
41.213	Carvacryl acetate	1361	0.04%	
41.998	alpha-Copaene	1373	0%	
44.822	beta-Caryophyllene	1416	3.01%	ALLERGEN
45.639	trans-alpha-Bergamotene	1429	0.01%	
45.994	Aromadendrene	1435	0.03%	
47.068	alpha-Humulene	1452	0.02%	
48.259	Unidentified	1471	0%	
49.265	Viridiflorene	1487	0.02%	
50.293	beta-Bisabolene	1504	0.65%	
50.612	gamma-Cadinene	1509	0.04%	
50.910	delta-Cadinene	1514	0.02%	
52.246	trans-alpha-Bisabolene	1537	0.01%	
54.385	Spathulenol	1573	0.04%	
54.710	Caryophyllene oxide	1578	0.08%	
58.143	tau-Cadinol	1638	0.04%	
58.906	Unidentified	1651	0.01%	
72.756	Unidentified	1913	0.03%	

Total Identified Compounds **99.85 %**



TIC
18,217,633

