



Essential Oil University

GC/MS Report

Item	Lot
Dill Weed EO <i>Anethum graveolens</i>	9J
Date	Analyst
12/6/2024	Dr. Robert S. Pappas

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The analysis of this batch sample, Dill Weed EO, meets the expected chemical profile for authentic essential oil of *Anethum graveolens*. 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:** Dill Weed EO**Botanical Name:** Anethum graveolens**Lot Number:** 9J**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** India**Analysis Date:** 12/6/2024**Manufacture Date:** November 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

+77.92

1.48732

0.91418



Ret. Time	Component	Ret. Idx.	Conc. %	
5.928	Unidentified	763	0.01%	
11.838	alpha-Thujene	923	0.09%	
12.241	alpha-Pinene	931	0.56%	
13.132	Unidentified	947	0.01%	
14.395	Sabinene	970	0.06%	
14.693	beta-Pinene	975	0.04%	
15.329	Myrcene	987	0.34%	
16.404	alpha-Phellandrene	1005	15.1%	
16.535	Unidentified	1007	0.01%	
17.046	Unidentified	1015	0.02%	
17.521	para-Cymene	1022	0.77%	
17.864	Limonene	1028	26.3%	IFRA
17.942	beta-Phellandrene	1029	1.71%	
18.216	cis-beta-Ocimene	1033	0.01%	
18.897	trans-beta-Ocimene	1044	0.01%	
19.679	gamma-Terpinene	1056	0.1%	
21.483	Terpinolene	1083	0.03%	
21.685	Unidentified	1086	0.01%	
21.802	para-Cymenene	1088	0.03%	
22.488	Unidentified	1099	0.01%	
28.354	Dill Ether	1184	3.75%	
28.942	Unidentified	1192	0.03%	
29.171	cis-Dihydrocarvone	1196	0.27%	
29.600	trans-Dihydrocarvone	1202	0.85%	
29.962	Unidentified	1207	0.06%	
30.521	Unidentified	1215	0.02%	
30.632	Unidentified	1217	0.02%	
31.476	Dihydrocarveol isomer	1229	0.02%	
31.582	Unidentified	1231	0.02%	
32.464	Carvone	1244	49.36%	IFRA
32.535	Unidentified	1245	0.05%	
32.681	Unidentified	1247	0.03%	
33.980	Unidentified	1266	0.01%	
34.295	Unidentified	1271	0.01%	
34.474	Carvone oxide isomer	1273	0.02%	IFRA
35.352	Unidentified	1286	0.01%	
37.361	Unidentified	1316	0.07%	
37.959	Unidentified	1325	0.01%	
38.744	Unidentified	1337	0.01%	
39.027	Unidentified	1342	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
39.962	Unidentified	1356	0.02%	
41.800	Unidentified	1384	0.01%	
42.157	Unidentified	1389	0.03%	
47.704	Unidentified	1478	0.01%	
51.740	Unidentified	1545	0.01%	
56.631	Unidentified	1629	0.01%	
57.837	Unidentified	1650	0.02%	
57.940	Unidentified	1652	0.01%	
64.484	Unidentified	1772	0.02%	
65.604	Unidentified	1793	0.01%	
67.230	Unidentified	1824	0.01%	

Total Identified Compounds **99.42 %**

