



Essential Oil University

GC/MS Report

Item	Lot
Bay Leaf (Laurel Leaf) EO <i>Laurus nobilis</i>	2G
Date	Analyst
1/22/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Bay Leaf (Laurel Leaf) EO, meets the expected chemical profile for authentic essential oil of *Laurus nobilis*. 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:** Bay Leaf (Laurel Leaf) EO**Botanical Name:** Laurus nobilis**Lot Number:** 2G**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Greece**Analysis Date:** 1/22/2025**Manufacture Date:** March 2023

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

-12.08

1.47060

0.92110



Ret. Time	Component	Ret. Idx.	Conc. %	
5.387	Methyl pyrrole	759	0.01%	
5.776	Ethyl isobutyrate	769	0.01%	
6.739	Isopropyl isobutyrate	793	0.01%	
6.920	Hexanal	798	0.02%	
8.564	Unidentified	839	0.01%	
8.736	Unidentified	843	0.02%	
8.832	Unidentified	846	0.04%	
10.104	Unidentified	878	0.01%	
10.820	Unidentified	896	0.02%	
11.455	Isobutyl isobutyrate	908	0.03%	
12.148	alpha-Thujene	920	0.14%	
12.565	alpha-Pinene	928	5.27%	
13.373	Unidentified	942	0.02%	
13.472	Camphene	944	0.26%	
14.756	Sabinene	967	7.01%	
15.060	beta-Pinene	972	3.22%	
15.689	Myrcene	983	0.39%	
16.465	Isobutyl 2-methylbutanoate	997	0.05%	
16.605	Unidentified	999	0.03%	
16.761	alpha-Phellandrene	1002	0.18%	
16.910	delta-3-Carene	1004	0.02%	
17.429	alpha-Terpinene	1012	0.38%	
17.912	para-Cymene	1019	1.55%	
18.226	Limonene	1024	3.18%	IFRA
18.434	1,8-Cineole	1027	39.38%	
18.614	cis-beta-Ocimene	1030	0.08%	
19.302	trans-beta-Ocimene	1040	0.12%	
20.089	gamma-Terpinene	1052	1.47%	
20.875	trans-Sabinene hydrate	1064	0.03%	
21.904	Terpinolene	1080	0.13%	
22.231	Unidentified	1084	0.03%	
22.865	Linalool	1094	8.23%	IFRA
25.674	trans-Pinocarveol	1135	0.03%	
27.708	delta-Terpineol	1164	0.06%	
27.818	Borneol	1165	0.04%	
28.435	Terpinen-4-ol	1174	2.47%	
29.432	alpha-Terpineol	1189	2.33%	
29.637	Estragole	1192	0.11%	IFRA
31.414	Nerol	1217	0.12%	
33.159	Linalyl acetate	1243	0.06%	



Ret. Time	Component	Ret. Idx.	Conc. %	
35.510	Bornyl acetate	1277	0.63%	
36.083	2-Undecanone	1285	0.06%	
37.445	delta-Terpinyol acetate	1305	0.12%	
39.107	Unidentified	1331	0.02%	
39.669	alpha-Terpinyol acetate	1339	14.9%	
39.942	Eugenol	1343	1.95%	IFRA
40.422	Neryl acetate	1351	0.06%	
42.467	beta-Elementene	1382	0.04%	
43.111	Methyleugenol	1391	5.29%	IFRA
44.382	beta-Caryophyllene	1411	0.22%	
45.925	trans-Cinnamyl acetate	1436	0.02%	
46.628	Unidentified	1447	0.02%	
48.690	Unidentified	1480	0.01%	
49.052	cis-Methyl isoeugenol	1486	0.06%	
51.810	trans-alpha-Bisabolene	1531	0.03%	
54.252	Unidentified	1572	0.01%	

Total Identified Compounds **99.77 %**

