



Essential Oil University

GC/MS Report

Item	Lot
Blue Tansy EO, Morocco <i>Tanacetum annuum</i>	0K
Date	Analyst
12/9/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Blue Tansy EO, Morocco, meets the expected chemical profile for authentic essential oil of *Tanacetum annuum*. 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: Blue Tansy EO, Morocco
Botanical Name: Tanacetum annuum
Lot Number: 0K
Production Method: Steam distilled

Sample Type: EO - Single
Country of Origin: Morocco
Analysis Date: 12/9/2025
Manufacture Date: August 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	METHOD	RESULTS
Optical Rotation @20°C	USP[781]	Not Measurable
Refractive Index @20°C	USP[831]	1.50030
Specific Gravity @20°C	USP[841]	0.90566



Ret. Time	Component	Ret. Idx.	Conc. %	
8.637	Ethyl 2-methylbutyrate	836	0.08%	
8.823	Ethyl isovalerate	840	0.03%	
12.083	Tricyclene	915	0.12%	
12.235	alpha-Thujene	918	0.27%	
12.651	alpha-Pinene	925	2.99%	ALLERGEN
13.198	Propyl 2-methylbutyrate	935	0.12%	
13.470	Unidentified	939	0.03%	
13.565	Camphene	941	0.99%	
14.869	Sabinene	964	16.61%	
15.169	beta-Pinene	969	7.92%	ALLERGEN
15.507	6-Methyl-hept-5-en-2-one	975	0.03%	
15.790	Myrcene	980	7.23%	PROP. 65
16.706	Pseudolimonene	996	0.09%	
16.863	alpha-Phellandrene	999	6.59%	
17.004	delta-3-Carene	1001	0.04%	
17.518	alpha-Terpinene	1009	0.57%	ALLERGEN
18.006	para-Cymene	1016	5.34%	
18.309	Limonene	1021	2.34%	ALLERGEN IFRA
18.414	beta-Phellandrene	1022	0.26%	
18.497	1,8-Cineole	1024	1.5%	
20.192	gamma-Terpinene	1049	1.36%	
20.991	trans-Sabinene hydrate	1061	0.14%	
22.009	Terpinolene	1076	0.9%	ALLERGEN
22.353	6,7-Epoxy-myrcene	1082	0.25%	
22.956	Linalool	1091	0.16%	ALLERGEN IFRA
23.050	cis-Sabinene hydrate	1092	0.05%	
23.186	2-Methylbutyl-2-methylbutyrate	1094	0.14%	
23.998	Unidentified	1106	0.15%	
24.674	cis-para-Menth-2-en-1-ol	1116	0.05%	
25.085	Limona ketone	1122	0.35%	
25.895	Unidentified	1133	0.08%	
26.264	Camphor	1138	10.43%	ALLERGEN
26.579	Unidentified	1143	0.1%	
26.799	Unidentified	1146	0.03%	
27.961	Borneol	1163	2.71%	
28.088	Carvenone	1165	0.03%	
28.562	Terpinen-4-ol	1171	1.94%	
28.809	Unidentified	1175	0.07%	
28.974	para-Cymen-8-ol	1177	0.04%	
29.564	alpha-Terpineol	1186	0.22%	ALLERGEN



Ret. Time	Component	Ret. Idx.	Conc. %	
30.105	alpha-Phellandrene epoxide	1193	0.07%	
30.358	Decanal	1197	0.04%	
30.512	trans-Piperitol	1199	0.03%	
31.152	Unidentified	1208	0.04%	
32.003	Hex-(3Z)-enyl 2-methylbutyrate	1221	0.05%	
32.360	Unidentified	1226	0.03%	
32.648	Unidentified	1230	0.03%	
32.797	Cuminal	1232	0.03%	IFRA
33.242	Carvotanacetone	1239	0.04%	
36.004	Thymol	1279	0.93%	
36.548	Carvacrol	1287	0.04%	
37.041	2-Methyl-4-methylhexylbutyrate	1294	0.04%	
38.597	Unidentified	1317	0.02%	
39.868	alpha-Cubebene	1337	0.03%	
41.531	para-Methylanisate	1362	0.03%	
41.753	alpha-Copaene	1365	0.64%	
42.533	Unidentified	1377	0.06%	
42.641	beta-Elemene	1379	0.29%	
44.571	beta-Caryophyllene	1408	2.25%	ALLERGEN
45.413	Unidentified	1422	0.06%	
45.885	cis-beta-Farnesene	1429	0.74%	
46.645	trans-beta-Farnesene	1441	0.09%	
46.817	alpha-Humulene	1444	0.16%	
47.485	Unidentified	1455	0.04%	
47.724	Unidentified	1458	0.06%	
48.029	gamma-Muurolene	1463	0.04%	
48.203	gamma-Curcumene	1466	0.07%	
48.410	Germacrene D	1469	1.43%	
48.620	Unidentified	1473	0.09%	
48.627	Unidentified	1473	0.07%	
48.821	Valencene	1476	0.17%	
48.907	beta-Selinene	1477	0.32%	
49.297	Bicyclogermacrene	1483	0.28%	
49.496	alpha-Muurolene	1487	0.04%	
50.220	3,6-Dihydrochamazulene	1498	3.58%	
50.346	3,6-Dihydrochamazulene isomer	1500	0.56%	
50.675	delta-Cadinene	1506	0.23%	
50.825	Dihydrochamazulene isomer	1508	0.09%	
51.017	beta-Sesquiphellandrene	1511	0.68%	
51.289	Dihydrochamazulene isomer	1516	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %
51.642	Unidentified	1522	0.04%
52.442	Unidentified	1535	0.04%
54.133	Spathulenol	1564	0.05%
54.457	Caryophyllene oxide	1569	0.26%
56.283	5,6-Dihydrochamazulene	1600	0.18%
57.057	Dihydrochamazulene isomer	1613	1.12%
57.248	Eremoligenol isomer	1617	0.14%
58.513	7,12-Dehydro-5,6,7,8-tetrahydrochamazulene	1639	0.97%
58.620	alpha-Eudesmol	1641	0.81%
58.831	Unidentified	1645	0.04%
59.571	Unidentified	1658	0.04%
60.319	Unidentified	1671	0.05%
62.745	Chamazulene	1714	7.54%
66.222	Unidentified	1779	0.04%
68.667	Phytone	1826	0.07%
73.941	meta-Camphorene	1930	0.16%
75.674	para-Camphorene	1965	0.05%
76.480	9-(15,16-Dihydro-15-methylenegeranyl)-alpha-Terpinene isomer	1982	0.17%
76.600	9-(15,16-Dihydro-15-methylene-geranyl)-para-cymene isomer	1984	0.04%
76.839	9-(15,16-Dihydro-15-methylenegeranyl)-alpha-Terpinene isomer	1989	0.98%
76.938	9-(15,16-Dihydro-15-methylene-geranyl)-para-cymene isomer	1991	0.21%
94.614	Unidentified isomer I	2393	0.21%
97.244	Unidentified isomer I	2459	0.92%

Total Identified Compounds **97.65 %**



TIC
11,114,153

