



# Essential Oil University

## GC/MS Report

Item	Lot
German Chamomile (Blue) EO <i>Matricaria chamomilla</i>	8G
Date	Analyst
10/14/2025	Dr. Robert S. Pappas

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**The analysis of this batch sample, German Chamomile (Blue) EO, meets the expected chemical profile for authentic essential oil of *Matricaria chamomilla*. 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:** German Chamomile (Blue) EO  
**Botanical Name:** Matricaria chamomilla  
**Lot Number:** 8G  
**Production Method:** Steam distilled

**Sample Type:** EO - Single  
**Country of Origin:** Bulgaria  
**Analysis Date:** 10/14/2025  
**Manufacture Date:** September 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]	1.50880
Specific Gravity @20°C	USP[841]	0.94500



Ret. Time	Component	Ret. Idx.	Conc. %	
8.629	Ethyl 2-methylbutyrate	836	0.07%	
10.958	Santolina triene	893	0.02%	
12.646	alpha-Pinene	925	0.07%	ALLERGEN
13.197	Propyl 2-methylbutyrate	934	0.03%	
14.842	Sabinene	963	0.04%	
15.151	beta-Pinene	969	0.03%	ALLERGEN
15.502	6-Methyl-hept-5-en-2-one	975	0.02%	
15.811	2-Pentyl furan	980	0.05%	
16.103	Yomogi alcohol	986	0.03%	
16.639	Octanal	995	0.02%	
17.995	para-Cymene	1016	0.08%	
18.301	Limonene	1021	0.04%	ALLERGEN IFRA
18.500	1,8-Cineole	1024	0.03%	
18.697	cis-beta-Ocimene	1027	0.09%	
19.028	Butyl 2-methylbutyrate	1032	0.01%	
19.388	trans-beta-Ocimene	1037	0.52%	
20.126	Unidentified	1048	0.28%	
20.160	gamma-Terpinene	1049	0.16%	
21.593	Artemisia alcohol	1070	0.04%	
22.005	Terpinolene	1076	0.07%	ALLERGEN
23.315	Nonanal	1096	0.03%	
27.364	beta-Artemisia acetate	1154	0.02%	
27.946	Borneol	1162	0.02%	
32.351	cis-3-Hexenyl isovalerate	1226	0.02%	IFRA
32.798	Unidentified	1232	0.02%	
34.663	Unidentified	1259	0.03%	
35.788	trans-Anethole	1276	0.05%	ALLERGEN
36.821	Tridecane	1291	0.03%	
38.413	Unidentified	1315	0.02%	
38.874	delta-Elemene	1322	0.12%	
40.885	Decanoic acid	1352	0.17%	
41.755	alpha-Copaene	1365	0.07%	
42.149	Modheph-2-ene	1371	0.06%	
42.297	Unidentified	1373	0.03%	
42.572	alpha-Isocomene	1378	0.12%	
42.610	Unidentified	1378	0.09%	
44.041	beta-Isocomene	1400	0.03%	
44.510	beta-Ylangene	1407	0.02%	
44.570	beta-Caryophyllene	1408	0.19%	ALLERGEN
45.216	beta-Copaene	1418	0.02%	



Ret. Time	Component	Ret. Idx.	Conc. %
45.756	Aromadendrene	1427	0.11%
46.530	Unidentified	1439	0.02%
46.698	trans-beta-Farnesene	1442	19.03%
46.785	alpha-Humulene	1443	0.05%
46.954	Unidentified	1446	0.02%
47.099	Alloaromodendrene	1448	0.1%
47.220	Unidentified	1450	0.02%
47.502	Dehydrosesquicineole	1455	0.08%
48.047	trans-Cadina-1(6),4-diene	1464	0.11%
48.209	gamma-Curcumene	1466	0.03%
48.425	Germacrene D	1470	2.26%
48.919	beta-Selinene	1477	0.15%
49.016	cis,trans-alpha-Farnesene	1479	0.53%
49.314	Bicyclogermacrene	1484	2.09%
49.497	alpha-Murolene	1487	0.06%
49.847	trans,trans-alpha-Farnesene	1492	2.64%
50.065	beta-Bisabolene	1496	0.14%
50.212	3,6-Dihydrochamazulene	1498	0.21%
50.369	gamma-Cadinene	1501	0.15%
50.495	Unidentified	1503	0.03%
50.681	delta-Cadinene	1506	0.21%
51.051	Matricaria ester	1512	1.36%
51.249	Unidentified	1515	0.04%
52.015	trans-alpha-Bisabolene	1528	0.03%
53.055	Unidentified	1546	0.03%
53.207	trans-Nerolidol	1548	0.11%
53.372	Unidentified	1551	0.02%
53.697	Dendrolasin	1556	0.14%
53.914	Matricaria ester analogue	1560	0.03%
54.139	Spathulenol	1564	0.66%
54.293	Unidentified	1566	0.02%
54.470	Caryophyllene oxide	1569	0.04%
54.606	Unidentified	1572	0.08%
54.680	Gleenol	1573	0.12%
54.848	Unidentified	1576	0.02%
55.085	Unidentified	1580	0.03%
55.188	Viridiflorol	1581	0.1%
55.312	Cubeban-11-ol	1583	0.03%
55.783	Ledol	1591	0.07%
55.917	Rosifoliol	1594	0.06%



Ret. Time	Component	Ret. Idx.	Conc. %	
56.250	Unidentified	1599	0.1%	
56.453	Unidentified	1603	0.15%	
56.708	Unidentified	1607	0.05%	
56.927	Unidentified	1611	0.06%	
57.038	Unidentified	1613	0.1%	
57.262	Unidentified	1617	0.16%	
57.369	Unidentified	1619	0.09%	
57.702	Unidentified	1625	0.05%	
57.909	tau-Cadinol	1628	0.37%	
58.020	epi-alpha-Muurolol	1630	0.05%	
58.169	Unidentified	1633	0.09%	
58.336	Unidentified	1636	0.02%	
58.633	alpha-Bisabolol oxide B	1641	7.31%	
58.814	Unidentified	1644	0.06%	
58.980	Unidentified	1647	0.17%	
59.005	Unidentified	1648	0.16%	
59.306	trans-Bisabolol-11-ol	1653	0.07%	
59.475	epi-alpha-Bisabolol	1656	0.1%	IFRA
59.745	Unidentified	1661	0.02%	
60.118	alpha-Bisabolone oxide A	1667	5.25%	
60.410	alpha-Bisabolol	1673	17.07%	IFRA
60.623	Unidentified	1676	0.08%	
62.209	Herniarin	1705	0.03%	IFRA
62.732	Chamazulene	1714	3.6%	
62.872	Unidentified	1717	0.08%	
63.838	alpha-Bisabolol oxide A	1735	25.73%	IFRA
64.356	Unidentified	1744	0.11%	
64.827	Unidentified	1753	0.04%	
66.187	Unidentified	1778	0.04%	
66.478	Unidentified	1784	0.02%	
66.942	Unidentified	1792	0.03%	
68.546	Unidentified	1823	0.02%	
68.678	Phytone	1826	0.22%	
70.530	cis-Tonghaosu	1862	3%	
71.213	trans-Tonghaosu	1875	0.24%	
72.911	Methyl hexadecanoate	1909	0.03%	
74.124	Unidentified	1934	0.08%	
81.532	Phytol	2089	0.04%	
82.860	Oxacycloheptadec-7-en-2-one	2118	0.1%	
89.999	Tricosane	2281	0.2%	



Ret. Time	Component	Ret. Idx.	Conc. %
94.097	Tetracosane	2380	0.04%
98.044	Pentacosane	2479	0.41%
105.512	Heptacosane	2677	0.06%
109.593	Unidentified	2791	0.42%

Total Identified Compounds **97.01 %**



TIC  
14,937,412

