



Essential Oil University

GC/MS Report

Item	Lot
Magnolia Flower EO <i>Magnolia x alba</i>	8E
Date	Analyst
12/6/2024	Dr. Robert S. Pappas

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The analysis of this batch sample, Magnolia Flower EO, meets the expected chemical profile for authentic essential oil of *Magnolia x alba*. 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:** Magnolia Flower EO**Botanical Name:** Magnolia x alba**Lot Number:** 8E**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** China**Analysis Date:** 12/6/2024**Manufacture Date:** August 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

-9.68

1.46641

0.88520



Ret. Time	Component	Ret. Idx.	Conc. %	
3.619	Unidentified	606	0.01%	
3.764	Methyl propionate	620	0.03%	
4.138	2-Methylbutanal	657	0.06%	
4.353	Methyl isobutyrate	678	0.02%	
4.921	Methyl butyrate	716	0.07%	
5.165	Unidentified	727	0.01%	
5.236	2-Methylbutanol	731	0.03%	
6.061	Methyl 2-methylbutyrate	769	5.65%	
8.090	2-Methylbutyric acid	835	0.2%	
8.345	Unidentified	842	0.01%	
9.010	Methyl tiglate	859	0.01%	
9.155	Unidentified	863	0.01%	
11.684	Methyl hexanoate	920	0.02%	
11.853	Unidentified	924	0.01%	
12.256	alpha-Pinene	931	0.16%	
13.149	Camphene	947	0.05%	
14.712	beta-Pinene	976	0.39%	
15.354	Myrcene	987	0.09%	
17.063	alpha-Terpinene	1015	0.03%	
17.544	Unidentified	1023	0.02%	
17.833	Limonene	1027	0.11%	IFRA
17.999	1,8-Cineole	1030	0.48%	
18.230	cis-beta-Ocimene	1033	1.45%	
18.916	trans-beta-Ocimene	1044	2.03%	
19.703	gamma-Terpinene	1056	0.04%	
20.495	cis-Linalool oxide (furanoid)	1068	0.12%	
21.564	trans-Linalool oxide (furanoid)	1084	0.16%	
21.934	Unidentified	1090	0.01%	
22.098	Clorius	1093	0.01%	
22.611	Linalool	1100	64.64%	IFRA
22.738	Hotrienol	1102	0.14%	
23.257	Phenethyl alcohol	1110	0.2%	
24.092	Unidentified	1122	0.01%	
24.406	allo-Ocimene	1126	0.13%	
26.313	Unidentified	1154	0.01%	
27.229	Unidentified	1167	0.01%	
27.385	Borneol	1170	0.06%	
27.553	Unidentified	1172	0.02%	
27.808	Menthol	1176	0.04%	
28.000	Terpinen-4-ol	1179	0.06%	



Ret. Time	Component	Ret. Idx.	Conc. %	
28.495	Hex-(3Z)-enyl butyrate	1186	0.01%	
28.997	alpha-Terpineol	1193	0.26%	
29.213	Estragole	1196	0.07%	IFRA
30.990	Nerol	1222	0.03%	
32.751	Geraniol	1248	0.1%	IFRA
32.995	2-Phenethyl acetate	1252	0.04%	
34.496	Unidentified	1274	0.02%	
34.798	trans-Linalool oxide acetate (pyranoid)	1278	0.15%	
35.413	Safrole	1287	0.05%	
38.742	Unidentified	1337	0.01%	
39.239	alpha-Cubebene	1345	0.05%	
39.370	Unidentified	1347	0.02%	
41.108	alpha-Copaene	1373	0.32%	
41.522	Elemene isomer	1380	0.07%	
42.011	beta-Elemene	1387	3.01%	
42.659	Methyleugenol	1397	2.29%	IFRA
43.518	cis-alpha-Bergamotene	1411	0.02%	
43.909	beta-Caryophyllene	1417	3.73%	
44.549	Unidentified	1427	0.02%	
44.764	trans-alpha-Bergamotene	1431	0.13%	
44.898	alpha-Guaiene	1433	0.03%	
45.143	Phenylethyl butyrate	1437	0.04%	
45.748	Unidentified	1446	0.03%	
46.010	Unidentified	1451	0.02%	
46.149	alpha-Humulene	1453	1.37%	
46.398	Unidentified	1457	0.02%	
47.263	Selina-4,11-diene	1471	0.36%	
47.371	trans-Cadina-1(6),4-diene	1472	0.12%	
47.739	Germacrene D	1478	0.54%	
47.978	Phenethyl 2-methylbutyrate	1482	0.3%	
48.110	Unidentified	1484	0.03%	
48.233	beta-Selinene	1486	1.48%	
48.364	Unidentified	1488	0.11%	
48.620	trans-Methyl isoeugenol	1492	0.6%	
48.665	alpha-Selinene	1493	1.26%	
48.830	alpha-Muurolene	1496	0.09%	
49.023	Unidentified	1499	0.07%	
49.192	trans,trans-alpha-Farnesene	1502	0.13%	
49.396	beta-Bisabolene	1505	0.28%	
49.702	gamma-Cadinene	1510	0.1%	



Ret. Time	Component	Ret. Idx.	Conc. %
49.815	Unidentified	1512	0.02%
50.014	delta-Cadinene	1516	1%
50.162	Unidentified	1518	0.09%
50.285	Unidentified	1520	0.02%
50.345	Unidentified	1521	0.04%
50.860	trans-Cadina-1,4-diene	1530	0.18%
51.105	Unidentified	1534	0.02%
51.374	alpha-Calacorene	1538	0.03%
51.628	Unidentified	1543	0.17%
51.795	Unidentified	1546	0.02%
52.540	trans-Nerolidol	1558	0.38%
53.763	Caryophyllene oxide	1579	0.44%
54.064	Unidentified	1584	0.02%
55.380	Humulene epoxide II	1606	0.11%
55.827	Unidentified	1614	0.1%
56.091	Unidentified	1619	0.03%
56.300	Unidentified	1623	0.01%
56.418	1-Epicubenol	1625	0.1%
56.644	Unidentified	1629	0.01%
56.928	Unidentified	1634	0.01%
57.139	Phenethyl hexanoate	1638	0.43%
57.328	epi-alpha-Murolol	1641	0.39%
57.468	Unidentified	1644	0.04%
57.661	Unidentified	1647	0.01%
57.973	Cadin-4-en-10-ol	1653	0.12%
58.122	Intermedeol	1655	0.55%
58.330	Unidentified	1659	0.03%
58.505	Unidentified	1662	0.02%
58.650	Unidentified	1665	0.01%
58.761	Unidentified	1667	0.1%
59.067	Unidentified	1672	0.02%
60.884	Unidentified	1705	0.05%
61.360	Unidentified	1713	0.01%
61.672	Unidentified	1719	0.03%
61.780	Unidentified	1721	0.04%
62.036	Unidentified	1726	0.02%
62.849	Unidentified	1741	0.04%
63.069	Unidentified	1745	0.02%
64.105	Unidentified	1765	0.03%
65.881	Unidentified	1798	0.01%



Ret. Time	Component	Ret. Idx.	Conc. %	
68.124	Phenylethyl octanoate	1842	0.03%	
69.195	Unidentified	1863	0.14%	
69.428	Unidentified	1867	0.18%	
69.771	Unidentified	1874	0.01%	
71.017	Nonadecane	1898	0.02%	
72.204	Methyl hexadecanoate	1923	0.05%	
80.052	Methyl linoleate	2088	0.44%	
80.300	Methyl linolenate	2093	0.26%	
80.520	Heneicosane	2098	0.04%	
89.241	Tricosane	2298	0.03%	
97.257	Pentacosane	2497	0.02%	

Total Identified Compounds **98.13 %**

