



Essential Oil University

GC/MS Report

Item	Lot
Amyris EO <i>Amyris balsamifera</i>	1S
Date	Analyst
11/4/2024	Dr. Robert S. Pappas

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The analysis of this batch sample, Amyris EO, meets the expected chemical profile for authentic essential oil of *Amyris balsamifera*. 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:** Amyris EO**Botanical Name:** Amyris balsamifera**Lot Number:** 1S**Production Method:** Steam distilled**Sample Type:** EO - Single**Country of Origin:** Haiti**Analysis Date:** 11/4/2024**Date of Distillation:** October 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

+34.08

1.50750

0.96123



Ret. Time	Component	Ret. Idx.	Conc. %	
18.529	Limonene	1024	0.02%	IFRA
25.723	Unidentified	1131	0%	
29.833	alpha-Terpineol	1189	0%	
33.587	Geraniol	1244	0%	
35.062	Unidentified	1265	0%	
36.014	Cogejierene	1279	0.01%	
37.144	Unidentified	1296	0.01%	
37.829	Unidentified	1306	0.01%	
40.293	Unidentified	1343	0%	
40.355	Eugenol	1344	0.01%	IFRA
40.746	Unidentified	1350	0.1%	
41.205	Unidentified	1357	0.01%	
41.337	Unidentified	1359	0.04%	
41.755	Unidentified	1365	0.03%	
42.462	Elemene isomer	1376	0.02%	
42.783	Unidentified	1381	0.09%	
42.941	beta-Elemene	1383	0.2%	
43.150	Unidentified	1386	0.03%	
43.354	Unidentified	1389	0.01%	
43.634	Unidentified	1394	0.01%	
43.800	Unidentified	1396	0%	
43.862	Unidentified	1397	0.06%	
43.979	Unidentified	1399	0.02%	
44.149	Unidentified	1401	0.07%	
44.454	Unidentified	1406	0%	
44.660	Unidentified	1410	0.02%	
44.871	beta-Caryophyllene	1413	0.06%	
44.995	Unidentified	1415	0.01%	
45.247	alpha-Guaiene	1419	0.09%	
45.405	Unidentified	1421	0.01%	
45.473	gamma-Elemene	1423	0.08%	
45.789	Unidentified	1428	0.05%	
45.894	Unidentified	1429	0.04%	
46.294	Unidentified	1436	0.02%	
46.645	Unidentified + Unidentified	1441	0.12%	
46.745	Amorpha-4,11-diene	1443	0.33%	
46.948	trans-beta-Farnesene	1446	0.01%	
47.078	Unidentified + alpha-Humulene	1448	0.12%	
47.250	alpha-Acoradiene	1451	1.15%	
47.346	Valerna-4,7(11)-diene	1452	0.32%	



Ret. Time	Component	Ret. Idx.	Conc. %	
47.471	Unidentified	1454	0.03%	
47.609	Unidentified	1457	0.02%	
47.715	Unidentified	1458	0.03%	
47.800	Unidentified	1460	0.04%	
47.882	Unidentified	1461	0.05%	
48.031	Unidentified	1463	0.05%	
48.240	Selina-4,11-diene isomer	1467	0.76%	
48.440	Epizonarene	1470	0.26%	
48.515	gamma-Curcumene	1471	0.8%	
48.712	Ar-Curcumene	1474	1.26%	
48.903	Selina-4,11-diene	1477	0.91%	
49.104	delta-Selinene	1480	0.31%	
49.223	beta-Selinene	1482	0.58%	
49.441	Valencene	1486	2.24%	
49.574	alpha-Zingiberene	1488	0.78%	
49.660	alpha-Selinene	1489	0.53%	
49.841	Unidentified	1492	0.04%	
50.069	Dihydroagarofuran isomer	1496	0.07%	
50.242	beta-Dihydroagarofuran	1498	0.96%	
50.366	Unidentified	1500	1.11%	
50.512	beta-Dihydroagarofuran	1503	0.61%	
50.631	Unidentified	1505	0.11%	
50.743	Unidentified	1507	0.08%	
50.910	Unidentified	1510	0.01%	
51.065	Selina-3,7(11)-diene isomer	1512	1.9%	
51.336	beta-Sesquiphellandrene	1517	1.17%	
51.601	Unidentified	1521	0.05%	
51.853	Unidentified	1525	1.17%	
51.925	Unidentified	1527	0.23%	
52.120	Selina-4(15),7(11)-diene	1530	0.35%	
52.185	Unidentified	1531	0.07%	
52.418	Selina-3,7(11)-diene	1535	3.77%	
52.810	Elemol	1541	9.09%	
52.957	Unidentified	1544	0.01%	
53.053	Unidentified	1546	0.01%	
53.245	Unidentified	1549	0.01%	
53.513	trans-Nerolidol	1553	0.42%	
54.097	Unidentified	1563	0.02%	
54.401	5-epi-7-epi-alpha-Eudesmol	1568	0.13%	
54.639	Unidentified	1572	0.01%	



Ret. Time	Component	Ret. Idx.	Conc. %	
54.778	Unidentified	1574	0.01%	
54.910	3,5,11-Eudesmatriene isomer	1577	0.01%	
55.024	Unidentified	1579	0.04%	
55.158	Unidentified	1581	0.04%	
55.230	Unidentified	1582	0.02%	
55.476	Unidentified	1586	0.01%	
55.677	Unidentified	1590	0.09%	
55.836	Unidentified	1592	0.05%	
55.930	Unidentified	1594	0.07%	
56.230	Eudesm-5-en-11-ol + Unidentified	1599	1.69%	
56.465	Unidentified	1603	0.11%	
56.657	3,5,11-Eudesmatriene isomer	1606	0.13%	
56.863	Intermedeol	1610	0.11%	
57.055	Eudesmol analogue	1613	0.32%	
57.163	10-epi-gamma-Eudesmol	1615	6.3%	
57.273	Guaiol	1617	0.89%	
57.468	Unidentified	1621	0.06%	
57.718	gamma-Eudesmol	1625	9.86%	
57.912	Eremoligenol isomer	1628	0.02%	
58.142	Hinesol isomer	1632	0.35%	
58.225	Unidentified	1634	0.05%	
58.407	Unidentified	1637	0.11%	
58.407	Unidentified	1637	0.8%	
58.502	Unidentified	1639	1.16%	
58.653	Unidentified	1642	0.34%	
59.034	Valerianol	1648	25.88%	
59.109	alpha-Eudesmol + beta-Eudesmol	1650	6.5%	
59.391	Unidentified + 7-epi-alpha-Eudesmol	1655	6.69%	
59.544	Unidentified	1657	0.2%	
59.788	Unidentified	1662	0.19%	
59.989	Unidentified	1665	0.1%	
60.173	Unidentified	1668	0.09%	
60.304	Unidentified	1671	0.7%	
60.536	Unidentified	1675	0.05%	
60.674	Unidentified	1677	0.08%	
60.771	Unidentified	1679	0.07%	
60.901	Unidentified	1681	0.07%	
61.314	Unidentified + Unidentified	1688	0.35%	
61.625	Unidentified	1694	0.09%	
61.903	Unidentified	1699	0.06%	



Ret. Time	Component	Ret. Idx.	Conc. %	
62.140	Curcuphenol isomer	1703	0.04%	
62.264	(2E,6E)-Farnesol	1706	0.05%	IFRA
62.424	Unidentified	1709	0.04%	
62.606	Unidentified	1712	0.03%	
62.707	Unidentified	1714	0.03%	
62.805	Unidentified	1716	0.03%	
63.022	Unidentified	1720	0.04%	
63.297	Unidentified	1725	0.08%	
63.411	Unidentified	1727	0.19%	
63.555	Unidentified	1730	0.04%	
63.762	Unidentified + Unidentified	1733	0.31%	
63.910	Unidentified	1736	0.03%	
64.297	Unidentified	1743	0.19%	
64.929	Unidentified	1755	0.02%	
65.216	Drimenol	1760	1.56%	
65.425	Unidentified	1764	0.02%	
65.628	Cryptomeridiol	1768	0.03%	
65.867	Unidentified	1772	0.05%	
66.066	Unidentified	1776	0.02%	
66.682	Unidentified	1788	0.02%	
67.984	Unidentified	1812	0.01%	
68.366	Unidentified	1820	0.01%	
68.744	Unidentified	1827	0.01%	
70.027	Unidentified	1852	0.02%	
70.286	Unidentified	1857	0.01%	
70.743	Unidentified	1866	0.06%	
72.916	Unidentified	1909	0.01%	
73.206	Unidentified	1915	0.01%	
75.745	Unidentified	1967	0.01%	

Total Identified Compounds **81.25 %**

