



Essential Oil University

GC/MS Report

Item	Lot
Copaiba Balsam EO <i>Copaifera langsdorffii</i>	6A
Date	Analyst
10/16/2025	Dr. Robert S. Pappas

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The analysis of this batch sample, Copaiba Balsam EO, meets the expected chemical profile for authentic essential oil of *Copaifera langsdorffii*. 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:** Copaiba Balsam EO**Botanical Name:** *Copaifera langsdorffii***Lot Number:** 6A**Production Method:** Extrusion**Sample Type:** EO - Single**Country of Origin:** Brazil**Analysis Date:** 10/16/2025**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

Optical Rotation @20°C

Refractive Index @20°C

Specific Gravity @20°C

METHOD

USP[781]

USP[831]

USP[841]

RESULTS

-14.28

1.50302

0.92972



Ret. Time	Component	Ret. Idx.	Conc. %	
17.949	Unidentified	1015	0.01%	
18.319	Limonene	1021	0.01%	ALLERGEN IFRA
18.715	cis-beta-Ocimene	1027	0.07%	
24.930	allo-Ocimene	1119	0.01%	
38.891	Elemene isomer	1322	0.04%	
39.113	delta-Elemene	1325	0.34%	
39.892	alpha-Cubebene	1337	0.48%	
40.101	Eugenol	1340	0.02%	ALLERGEN IFRA
41.352	alpha-Ylangene	1359	0.1%	
41.788	alpha-Copaene	1366	4.09%	
42.184	Elemene isomer	1372	0.02%	
42.305	Unidentified	1373	0.02%	
42.568	beta-Cubebene	1377	0.31%	
42.670	beta-Elemene	1379	1.04%	
42.987	Copaene isomer	1384	0.02%	
43.552	Cyperene	1392	0.21%	
43.641	cis-beta-Caryophyllene	1394	0.05%	ALLERGEN
43.815	beta-Maaliene	1396	0.03%	
44.102	alpha-Gurjunene	1401	0.02%	
44.253	cis-alpha-Bergamotene	1403	0.08%	
44.385	alpha-Cedrene	1405	0.01%	IFRA
44.746	beta-Caryophyllene	1411	57.43%	ALLERGEN
45.206	gamma-Elemene	1418	0.92%	
45.454	trans-alpha-Bergamotene	1422	4.53%	
45.783	Aromadendrene	1427	0.09%	
45.915	cis-beta-Farnesene	1430	0.22%	
46.106	beta-Humulene	1433	0.06%	
46.326	epi-beta-Santalene	1436	0.08%	
46.450	trans-Murrola-3,5-diene	1438	0.05%	
46.563	Isogermacrene D	1440	0.03%	
46.678	trans-beta-Farnesene	1442	0.17%	
46.863	alpha-Humulene	1445	4.64%	
47.125	Alloaromodendrene	1449	0.33%	
47.252	cis-Muurolo-4(14),5-diene	1451	0.03%	
47.593	Unidentified	1456	0.04%	
47.877	trans-Cadina-1(6),4-diene	1461	0.12%	
48.064	gamma-Muuroloene	1464	1.31%	
48.227	gamma-Curcumene	1466	0.09%	
48.365	alpha-Amorphene	1469	0.17%	
48.458	Germacrene D	1470	6.4%	



Ret. Time	Component	Ret. Idx.	Conc. %	
48.617	trans-beta-Bergamotene	1473	0.47%	
48.809	delta-Selinene	1476	0.05%	
48.935	beta-Selinene	1478	0.68%	
49.100	Viridiflorene	1480	0.11%	
49.140	trans-Murrola-4(14),5-diene	1481	0.2%	
49.344	Bicyclogermacrene	1484	1.05%	
49.517	alpha-Muurolene	1487	0.45%	
49.640	cis-alpha-Bisabolene	1489	0.18%	
49.785	delta-Amorphene	1491	0.1%	
49.860	Caparratriene	1492	0.06%	
50.089	beta-Bisabolene	1496	2%	
50.271	cis-gamma-Bisabolene	1499	0.19%	
50.398	gamma-Cadinene	1501	0.51%	
50.540	Cubebol	1503	0.07%	
50.708	delta-Cadinene	1506	2.19%	
50.896	cis-Calamenene	1509	0.04%	
51.035	beta-Sesquiphellandrene	1512	0.37%	
51.216	trans-gamma-Bisabolene	1515	0.04%	
51.554	trans-Cadina-1,4-diene	1520	0.1%	
51.812	alpha-Cadinene	1525	0.18%	
52.038	trans-alpha-Bisabolene	1529	0.36%	
53.124	Germacrene B	1547	1.2%	
53.304	beta-Calacorene	1550	0.03%	
53.752	Unidentified	1557	0.06%	
54.100	Caryophyllene alcohol	1563	0.26%	
54.481	Caryophyllene oxide	1569	0.2%	
54.696	Globulol	1573	0.08%	
54.956	Unidentified	1577	0.02%	
55.205	Viridiflorol	1582	0.08%	
55.340	Guaiol	1584	0.03%	
55.682	Unidentified	1590	0.01%	
55.805	Ledol	1592	0.07%	
55.936	Rosifoliol	1594	0.01%	
56.097	Unidentified	1597	0.03%	
56.418	1,10-di-epi-Cubenol	1602	0.03%	
56.765	Unidentified	1608	0.07%	
56.828	Humulane-1,6-dien-3-ol	1609	0.45%	
57.025	Unidentified	1613	0.01%	
57.127	1-Epicubenol	1615	0.11%	
57.488	Unidentified	1621	0.09%	



Ret. Time	Component	Ret. Idx.	Conc. %	
57.651	alpha-Acorenol	1624	0.02%	
57.926	tau-Cadinol	1629	0.15%	
58.032	epi-alpha-Cadinol	1631	0.36%	
58.184	delta-Cadinol	1633	0.39%	
58.345	Unidentified	1636	0.01%	
58.676	alpha-Cadinol	1642	0.57%	
58.843	Unidentified	1645	0.08%	
59.187	Unidentified	1651	0.03%	
59.327	Unidentified	1653	0.05%	
59.568	epi-beta-Bisabolol	1658	0.2%	
59.734	cis-alpha-Santalol	1661	0.1%	ALLERGEN
60.370	epi-alpha-Bisabolol	1672	0.03%	IFRA
60.498	alpha-Bisabolol	1674	0.04%	IFRA
61.058	Unidentified	1684	0.21%	
62.018	Santalol isomer	1701	0.04%	ALLERGEN
73.934	Unidentified	1930	0.02%	
74.082	Unidentified	1933	0.02%	
75.213	Unidentified	1956	0.08%	
75.466	Unidentified	1961	0.02%	
78.213	Unidentified	2018	0.03%	
78.740	Unidentified	2030	0.03%	
78.979	Manool isomer	2035	0.08%	
79.507	Kolavelool isomer	2046	0.42%	
85.456	Unidentified	2176	0.05%	
86.139	Unidentified	2192	0.02%	
86.936	Manool isomer	2210	0.04%	
87.546	Unidentified	2224	0.03%	
88.759	Kolavelool isomer	2253	0.28%	
90.000	Unidentified	2281	0.02%	
90.060	Unidentified	2283	0.06%	
90.988	Unidentified	2305	0.01%	
91.287	Copalol isomer	2312	0.19%	
91.864	Kolavelool isomer	2326	0.17%	
92.784	Kolavelool isomer	2348	0.03%	
93.501	Kolavelool isomer	2366	0.05%	
94.851	Unidentified	2398	0.07%	
97.314	Unidentified	2461	0.03%	
99.020	Unidentified	2504	0.02%	
103.427	Unidentified	2620	0.01%	

Total Identified Compounds **98.73 %**



TIC
41,001,959

