



Essential Oil University

GC/MS Report

Item	Lot
Copaiba Balsam EO <i>Copaifera langsdorffii</i>	8B
Date	Analyst
12/9/2025	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: 8B
Production Method: Extrusion

Sample Type: EO - Single
Country of Origin: Brazil
Analysis Date: 12/9/2025
Manufacture Date: November 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]	-12.16
Refractive Index @20°C	USP[831]	1.50555
Specific Gravity @20°C	USP[841]	0.93423



Ret. Time	Component	Ret. Idx.	Conc. %	
17.908	Unidentified	1015	0.01%	
18.676	cis-beta-Ocimene	1026	0.07%	
24.889	allo-Ocimene	1119	0.01%	
38.838	Elemene isomer	1321	0.03%	
39.061	delta-Elemene	1324	0.41%	
39.840	alpha-Cubebene	1336	0.58%	
41.297	alpha-Ylangene	1358	0.09%	
41.733	alpha-Copaene	1365	4.49%	
42.116	Elemene isomer	1371	0.04%	
42.280	Unidentified	1373	0.02%	
42.514	beta-Cubebene	1377	0.29%	
42.617	beta-Elemene	1378	1.02%	
42.930	Unidentified	1383	0.01%	
43.111	Unidentified	1386	0.02%	
43.494	Cyperene	1391	0.24%	
43.586	cis-beta-Caryophyllene	1393	0.05%	ALLERGEN
43.760	Unidentified	1396	0.02%	
44.015	Unidentified	1399	0.02%	
44.198	cis-alpha-Bergamotene	1402	0.08%	
44.350	Unidentified	1405	0.01%	
44.690	beta-Caryophyllene	1410	57.88%	ALLERGEN
44.875	Unidentified	1413	0.01%	
45.152	gamma-Elemene	1417	0.85%	
45.397	trans-alpha-Bergamotene	1421	4.09%	
45.728	Aromadendrene	1427	0.1%	
45.860	Sesquisabinene	1429	0.19%	
46.043	Unidentified	1432	0.06%	
46.265	epi-beta-Santalene	1435	0.08%	
46.394	cis-Murrola-3,5-diene	1437	0.05%	
46.505	trans-Murrola-3,5-diene	1439	0.02%	
46.619	trans-beta-Farnesene	1441	0.2%	
46.805	alpha-Humulene	1444	4.64%	
47.067	Alloaromodendrene	1448	0.34%	
47.194	Unidentified	1450	0.03%	
47.312	gamma-Decalactone	1452	0.01%	
47.531	Unidentified	1455	0.03%	
47.821	cis-Cadina-1(6),4-diene	1460	0.11%	
48.005	trans-Cadina-1(6),4-diene	1463	1.32%	
48.169	Unidentified	1465	0.09%	
48.275	Unidentified	1467	0.11%	



Ret. Time	Component	Ret. Idx.	Conc. %
48.395	Germacrene D	1469	5.46%
48.557	(Z,E)-alpha-Farnesene	1472	0.44%
48.753	delta-Selinene	1475	0.05%
48.879	beta-Selinene	1477	0.7%
49.055	Unidentified	1480	0.13%
49.083	gamma-Muurolene	1480	0.18%
49.289	Bicyclogermacrene	1483	1.01%
49.459	alpha-Muurolene	1486	0.43%
49.584	alpha-Bisabolene	1488	0.25%
49.730	Cadinene isomer	1490	0.11%
49.799	Unidentified	1491	0.07%
50.035	beta-Bisabolene	1495	2.48%
50.216	cis-gamma-Bisabolene	1498	0.16%
50.340	gamma-Cadinene	1500	0.53%
50.475	Unidentified	1502	0.1%
50.653	delta-Cadinene	1505	2.24%
50.847	cis-Calamenene	1509	0.06%
50.981	beta-Sesquiphellandrene	1511	0.38%
51.159	trans-gamma-Bisabolene	1514	0.04%
51.496	trans-Cadina-1,4-diene	1519	0.1%
51.754	Unidentified	1524	0.17%
51.978	trans-alpha-Bisabolene	1527	0.4%
52.152	Unidentified	1530	0.03%
53.064	Germacrene B	1546	0.97%
53.254	Unidentified	1549	0.04%
53.690	Maaliol	1556	0.09%
54.041	Caryophyllene alcohol	1562	0.27%
54.424	Caryophyllene oxide	1569	0.13%
54.641	Globulol	1572	0.06%
55.145	Viridiflorol	1581	0.06%
55.279	Unidentified	1583	0.02%
55.620	Unidentified	1589	0.01%
55.748	Ledol	1591	0.06%
55.871	Rosifoliol	1593	0.01%
56.359	Unidentified	1601	0.02%
56.695	Unidentified	1607	0.08%
56.768	Humulane-1,6-dien-3-ol	1608	0.5%
56.840	Eudesm-5-en-11-ol	1610	0.03%
57.070	Epicubenol	1614	0.11%
57.429	Unidentified	1620	0.08%



Ret. Time	Component	Ret. Idx.	Conc. %	
57.871	epi-alpha-Cadinol	1628	0.13%	
57.971	epi-alpha-Muurolol	1629	0.31%	
58.124	alpha-Muurolol	1632	0.37%	
58.619	Cadin-4-en-10-ol	1641	0.52%	
58.782	Unidentified	1644	0.08%	
59.265	Unidentified	1652	0.01%	
59.449	Unidentified	1656	0.05%	
59.527	beta-Bisabolol	1657	0.04%	
60.308	alpha-Bisabolol	1671	0.03%	IFRA
60.431	Unidentified	1673	0.02%	
60.993	Unidentified	1683	0.17%	
73.868	Unidentified	1928	0.01%	
74.020	Unidentified	1932	0.03%	
74.480	Unidentified	1941	0.03%	
75.148	Unidentified	1955	0.1%	
75.400	Unidentified	1960	0.03%	
78.150	Unidentified	2017	0.04%	
78.674	Unidentified	2028	0.01%	
78.914	Manool	2033	0.1%	
79.442	Kolavelool	2044	0.61%	
85.394	Unidentified	2175	0.07%	
85.920	Unidentified	2187	0.01%	
86.869	Unidentified	2208	0.07%	
87.484	Unidentified	2223	0.04%	
88.691	Unidentified	2251	0.36%	
89.895	Unidentified	2279	0.02%	
89.992	Unidentified	2281	0.1%	
90.920	Unidentified	2303	0.02%	
91.224	Copalol	2310	0.23%	
91.794	Kolavenol	2324	0.19%	
92.335	Unidentified	2337	0.01%	
93.436	Unidentified	2364	0.07%	
94.782	Unidentified	2397	0.13%	
98.946	Unidentified	2502	0.01%	
100.090	Unidentified	2532	0.01%	
103.358	Unidentified	2618	0.03%	
105.482	Unidentified	2676	0.16%	

Total Identified Compounds **97.12 %**



TIC
38,094,932

