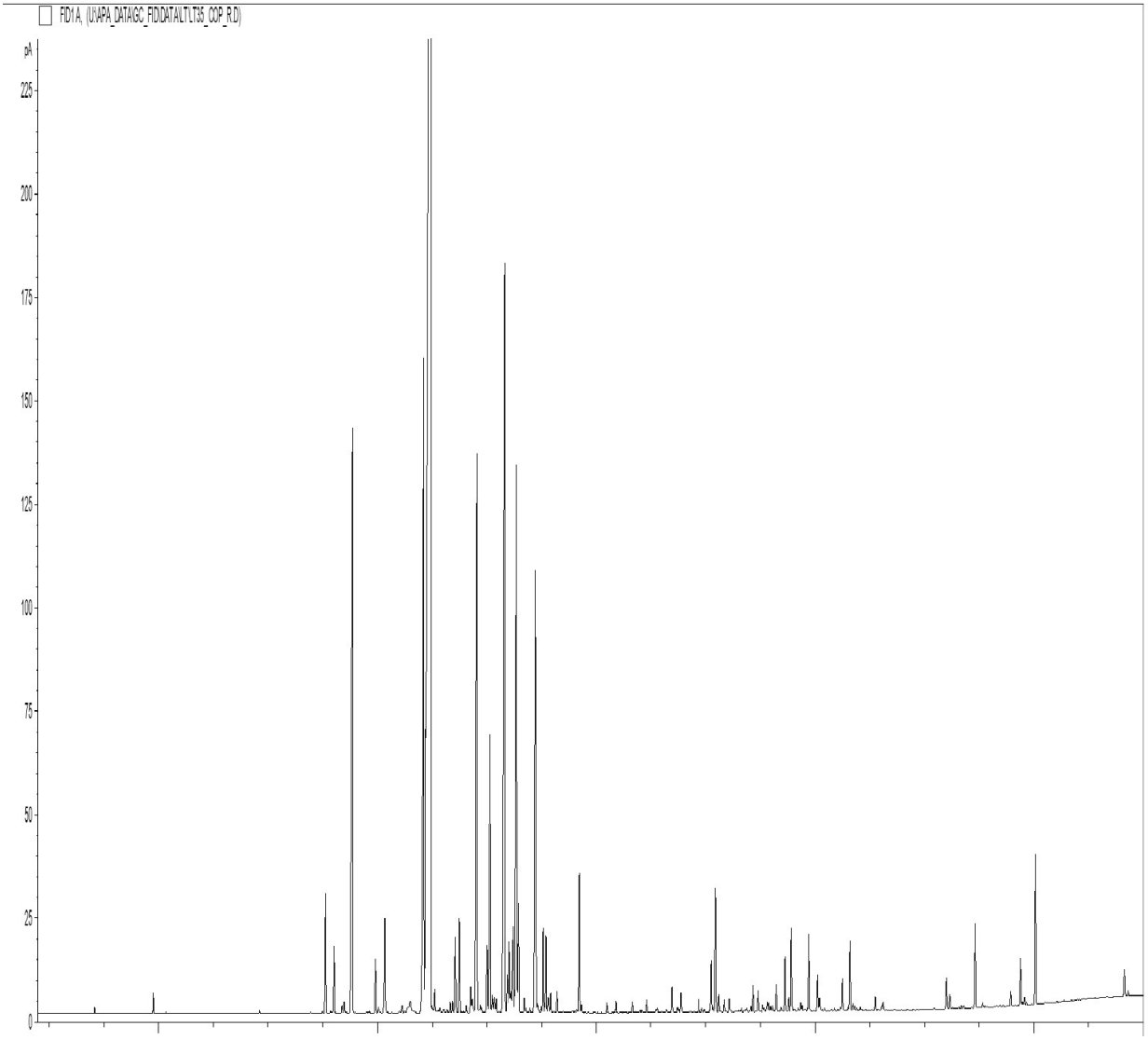
MALIKA ESSENTIALS

GC/MS ANALYSIS REPORT

Product Name	Copaiba Balsam Essential Oil
Botanical Name	Copaifera officinalis
Analysis Date	May 29, 2024

Note: This GC/MS report is a representative analysis of this product. Due to volume turnover, it is not specific to an individual lot; specific lots may vary slightly, as is the case with natural products. The lot-specific quality document for each batch is its Certificate of Analysis.

Chromatogram



Identified Compounds

Peak	RT (min)	Compound name	%
1	14.17	p-MENTH-8-ENE	0.03
2	19.53	cis-beta-OCIMENE	0.11
3	29.24	ALLO-OCIMENE	0.02
4	35.28	alpha-CUBEBENE	0.84
5	35.73	ELEMENE ISOMER	0.02
6	36.06	delta-ELEMENE	0.46
7	36.77	ISOLEDENE	0.06
8	36.95	YLANGENE	0.09
9	37.72	alpha-COPAENE	5.93
10	39.79	CYPERENE	0.39
11	40.05	alpha-GURJUNENE	0.05
12	40.26	SESQUITERPENE	0.02
13	40.71	beta1-CUBEBENE	0.80
14	42.04	BERGAMOTENE ISOMER	0.02
15	42.26	COMPOUND Mw=206	0.08
16	42.82	alpha-cis-BERGAMOTENE	0.09
17	42.99	epsilon-CADINENE	0.23
18	44.21	alpha-trans-BERGAMOTENE	5.65

19	44.39	beta-CARYOPHYLLENE	39.49
20		beta-ELEMENE	
21	44.94	SESQUITERPENE	0.06
22	45.21	AROMADENDRENE	0.17
23	45.53	GURJUNENE ISOMER	0.02
24	45.67	SESQUITERPENE	0.04
25	46.00	SESQUITERPENE	0.02
26	46.08	SESQUITERPENE	0.02
27	46.41	GURJUNENE ISOMER	0.02
28	46.67	CADINA-3,5-DIENE	0.07
29	46.88	Epi-beta-SANTALENE	0.07
30	47.13	GERMACRENE A	0.54
31	47.50	ALLO-AROMADENDRENE	0.68
32	48.13	FARNESENE ISOMER	0.05
33	48.52	ZONARENE	0.20
34	48.68	SESQUITERPENE	0.12
35	49.09	alpha-HUMULENE	5.20
36	49.15	E-beta-FARNESENE	0.35
37	49.39	gamma-SELINENE	0.08
38	49.52	SESQUITERPENE	0.03
39	50.01	Z-beta-FARNESENE	0.58
40	50.27	gamma-MUUROLENE	2.18
41	50.47	gamma-CURCUMENE	0.14
42	50.67	LEDENE	0.13
43	50.84	COMPOUND Mw=206	0.10
44	51.59	GERMACRENE D	8.15
45	51.84	SESQUITERPENE	0.40
46	52.05	beta-SELINENE	0.47
47	52.23	SESQUITERPENE	0.22
48	52.35	alpha-SELINENE	0.28
49	52.43	alpha-MUUROLENE	0.54
50	52.72	beta-BISABOLENE	4.68
51		cis-alpha-BISABOLENE	
52	52.92	BICYCLOGERMACRENE	0.75
53	53.43	beta-CURCUMENE	0.10
54	53.59	SESQUITERPENE	0.03
55	53.94	SESQUITERPENE	0.03
56	54.43	delta-CADINENE	3.84
57		gamma-CADINENE	
58	54.62	7-epi-alpha-SELINENE	0.07
59	54.95	delta-SELINENE	0.04
60	55.14	beta-SESQUIPHELLANDRENE	0.53
61	55.35	alpha-CURCUMENE	0.06
62	55.40	trans-alpha-BISABOLENE	0.47
63	55.59	SELINADIENE ISOMER	0.14
64	55.81	CADINA-1,4-DIENE	0.13
65	56.39	alpha-AMORPHENE	0.13
66	58.23	SESQUITERPENE	0.02
67	58.47	GERMACRENE B	0.97
68	58.66	cis-CALAMENENE	0.06
69	60.96	COMPOUND Mw=208	0.06
70	61.78	Epi-CUBEBOL	0.07
71	63.26	alpha-CALACORENE	0.08
72	63.59	HUMULENE EPOXIDE	0.01
73	64.02	PALUSTROL	0.02
74	64.17	SESQUITERPENIC OXIDE	0.02
75	64.62	CUBEBOL	0.08

76	65.48	beta-CALACORENE	0.02
77	65.58	AROMATIC COMPOUND	0.03
78	65.97	SESQUITERPENIC OXIDE	0.01
79	66.41	ISOCARYOPHYLLENE OXIDE	0.02
80	66.91	CARYOPHYLLENE OXIDE	0.18
81	67.39	SESQUITERPENOL	0.03
82	67.50	ALIPHATIC ESTER	0.03
83	67.71	SESQUITERPENOL	0.16
84	69.36	LEDOL	0.09
85	69.64	EPOXY-6,7-HUMULENE	0.03
86	69.88	GLEENOL	0.03
87	70.51	CARYOPHYLLENOL	0.38
88	70.65	SESQUITERPENOL	0.04
89	70.89	JUNEOL	1.01
90		Epi-CUBENOL	
91	71.20	CUBENOL	0.12
92	71.69	GLOBULOL	0.08
93	72.14	VIRIDIFLOROL	0.09
94	72.24	SESQUITERPENOL Mw=222	0.02
95	73.25	10-epi-gamma-EUDESMOL	0.02
96	73.62	AROMATIC COMPOUND	0.02
97	73.73	ROSIFOLIOL	0.03
98	74.10	SPATHULENOL	0.05
99	74.29	WIDDROL	0.16
100	74.75	SESQUITERPENOL	0.15
101	75.21	SESQUITERPENOL	0.06
102	75.35	SESQUITERPENOL	0.04
103	75.65	SESQUITERPENOL	0.09
104	75.78	SESQUITERPENOL	0.06
105	75.95	SESQUITERPENOL	0.05
106	76.12	SESQUITERPENOL	0.05
107	76.46	T-CADINOL	0.20
108	76.87	SESQUITERPENOL	0.04
109	77.25	alpha-MUUROLOL	0.37
110	77.60	SESQUITERPENOL	0.09
111	77.80	delta-CADINOL	0.63
112	78.13	SESQUITERPENOL	0.03
113	78.44	SESQUITERPENIC COMPOUND	0.03
114	78.67	Epi-alpha-BISABOLOL	0.06
115	78.79	alpha-BISABOLOL	0.04
116	79.10	CADALENE	0.03
117	79.39	alpha-CADINOL	0.54
118	80.19	DITERPENE	0.29
119	80.38	EUDESMA-7(11)-EN-4-OL	0.12
120	80.82	beta-NOOTKATOL	0.03
121	81.52	DITERPENE	0.02
122	82.09	SESQUITERPENOL	0.02
123	82.33	cis-alpha-BISABOLOL	0.03
124	82.50	JUNIPER CAMPHOR	0.23
125	83.02	SESQUITERPENOL	0.03
126	83.19	SESQUITERPENIC OXIDE	0.51
127	83.47	AROMATIC COMPOUND	0.06
128	83.61	SESQUITERPENOL	0.04
129	83.81	DITERPENE	0.02
130	84.11	SESQUITERPENIC OXIDE	0.03
131	85.48	AROMATIC COMPOUND	0.10
132	86.06	SESQUITERPENIC OXIDE	0.04

133	86.19	DITERPENE	0.06
134	87.24	AROMATIC COMPOUND	0.02
135	91.97	COMPOUND Mw=262	0.24
136	92.26	COMPOUND Mw=262	0.12
137	93.39	SESQUITERPENOL	0.02
138	93.59	SESQUITERPENIC OXIDE	0.02
139	94.64	COMPOUND Mw=262	0.62
140	95.31	COMPOUND Mw=262	0.04
141	97.84	DITERPENE	0.11
142	98.79	Epi-MANOOL	0.34
143	98.96	AROMATIC COMPOUND	0.03
144	99.15	DITERPENE	0.07
145	100.14	AROMATIC COMPOUND	1.11
146	108.24	METHYL COPALATE	0.24
147	108.59	DITERPENE	0.05
148	111.78	ALCOHOL COMPOUND	0.49
149	113.60	SESQUITERPENIC OXIDE	0.03
150	115.21	SESQUITERPENIC OXIDE	0.32
151	116.55	AROMATIC COMPOUND	0.11
152	118.59	AROMATIC COMPOUND	0.03
153	119.99	AROMATIC COMPOUND	0.50
154	120.36	SESQUITERPENIC OXIDE	0.11
155	122.31	AROMATIC COMPOUND	0.06
156	128.84	COMPOUND Mw=260	0.22
157	131.55	COMPOUND Mw=330	0.29
		TOTAL	**99.64**

In the source report, peaks 20 (beta-ELEMENE), 51 (cis-alpha-BISABOLENE), 57 (gamma-CADINENE) and 90 (Epi-CUBENOL) are listed without RT or %; they co-elute with adjacent peaks.

Faithful copy of the GC/MS analysis report. The original document is kept in the MALIKA Essentials archives.