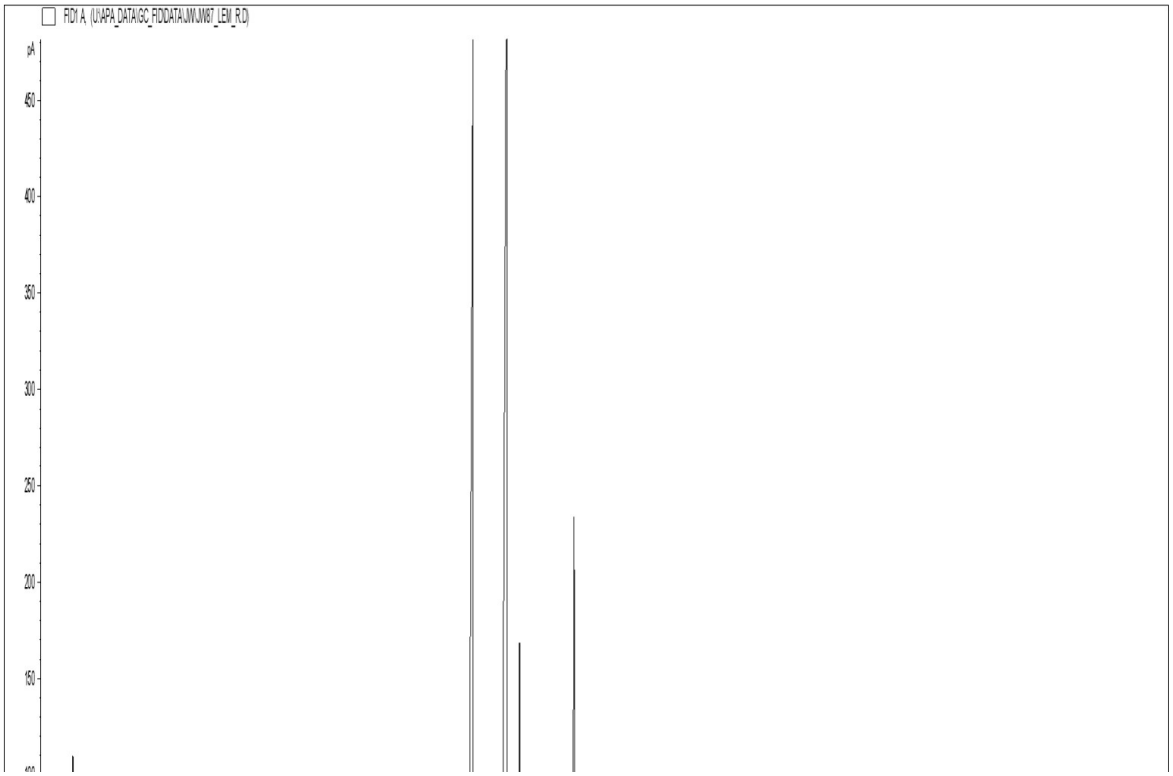
MALIKA ESSENTIALS

GC/MS ANALYSIS REPORT

Product Name	Lemongrass Essential Oil
Botanical Name	Cymbopogon flexuosus
Analysis Date	September 13, 2023

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	5.31	ISOVALERALDEHYDE	0.02
2	6.66	TRICYCLENE	0.17

3	6.95	alpha-PINENE	0.25
4	7.03	3-BUTEN-2-OL, 2-METHYL-	0.04
5	8.03	CAMPHENE	1.36
6	9.35	beta-PINENE	0.02
7	9.87	SABINENE	0.01
8	10.05	4-HEPTANONE	0.02
9	11.80	beta-MYRCENE	0.07
10	11.86	alpha-PHELLANDRENE	0.01
11	13.14	1,8-CINEOLE, 2,3-DEHYDRO-	0.05
12	13.67	LIMONENE	1.00
13	13.86	1,8-CINEOLE	0.02
14	14.16	beta-PHELLANDRENE	0.04
15	15.79	cis-beta-OCIMENE	0.29
16	16.35	gamma-TERPINENE	0.01
17	16.81	trans-beta-OCIMENE	0.19
18	17.77	p-CYMENE	0.01
19	18.63	TERPINOLENE	0.05
20	19.25	OCTANAL	0.06
21	21.85	4-NONANONE	1.17
22	22.30	5-HEPTEN-2-ONE, 6-METHYL-	1.53
23	23.41	5-HEPTENAL, 2,6-DIMETHYL-	0.03
24	24.96	ALLO-OCIMENE	0.01
25	26.60	ROSEFURAN	0.11
26	27.55	PERILLENE	0.08
27	27.71	PHOTOCITRAL ISOMER	0.11
28	28.51	COMPOUND Mw=152	0.02
29	29.36	LINALOOL cis-OXIDE	0.01
30	30.85	alpha-CUBEBENE	0.02
31	31.03	5-HEPTEN-2-OL, 6-METHYL-	0.02
32	31.28	LINALOOL trans-OXIDE	0.02
33	32.00	CITRONELLAL	0.32
34	32.19	ISOGERANIAL	0.20
35		ISOLEDENE	
36	32.42	YLANGENE	0.11
37	33.07	alpha-COPAENE	0.02
38	33.63	DECANAL	0.11
39	33.66	EXO-ISOCITRAL	0.30
40	34.36	CAMPHOR	0.02
41	34.67	beta-BOURBONENE	0.04
42	35.07	SATIVENE	0.02
43	35.89	4-UNDECANONE	0.05
44	36.08	beta1-CUBEBENE	0.03
45	36.13	Z-ISOCITRAL	0.71
46	36.64	LINALOOL	1.09
47	37.42	1-OCTANOL	0.01
48	37.94	E-ISOCITRAL	1.05
49	38.19	epsilon-CADINENE	0.05
50	39.34	beta-ELEMENE	0.13
51	39.55	beta-CARYOPHYLLENE	1.34
52	39.82	ROSEFURAN OXIDE	0.18
53	39.87	TERPINENE-4-OL	0.07
54	40.33	6,9-GUAIADIENE	0.02
55	40.95	SESQUITERPENE	0.02
56	41.47	cis-p-MENTHA-2,8-DIEN-1-OL	0.02
57	41.89	CADINA-3,5-DIENE	0.02
58	42.43	MENTHOL	0.04
59	43.28	COMPOUND Mw=152	0.01
60	43.38	COMPOUND Mw=152	0.02

61	43.64	ZONARENE	0.02
62	44.05	alpha-HUMULENE	0.15
63	44.34	cis-4,5-MUUROLADIENE	0.02
64	45.21	NERAL	31.59
65	45.52	TERPENIC ALCOHOL	0.02
66	45.73	gamma-MUUROLENE	0.04
67	45.82	alpha-TERPINEOL	0.15
68	45.86	BORNEOL	0.14
69	46.25	GERANYL FORMATE	0.04
70	46.57	GERMACRENE D	0.15
71	46.91	MUUROLADIENE ISOMER	0.02
72	47.06	SESQUITERPENE	0.02
73	47.43	PIPERITONE	0.07
74	47.75	alpha-MUUROLENE	0.02
75	48.35	GERANIAL	40.33
76	48.70	cis-ISOPIPERITENOL	0.05
77	48.96	trans-ISOPIPERITENOL	0.05
78	49.52	GERANYL ACETATE	3.12
79	49.55	delta-CADINENE	0.27
80	49.65	gamma-CADINENE	1.20
81	49.94	SESQUITERPENE	0.05
82	50.04	CITRONELLOL	0.11
83	50.65	SESQUITERPENE	0.03
84	50.89	CADINA-1,4-DIENE	0.02
85	51.03	ALIPHATIC ALCOHOL	0.02
86	51.41	alpha-AMORPHENE	0.04
87	51.81	NEROL	0.36
88	52.28	cis-ISOGERANIOL	0.02
89	52.49	trans-ISOGERANIOL	0.02
90	52.80	CUPARENE	0.02
91	53.28	GERMACRENE B	0.02
92	54.59	GERANIOL	6.61
93	57.04	Epi-CUBEBOL	0.08
94	57.34	GERANYL BUTYRATE	0.10
95	58.71	ISOPHYTYL ACETATE	0.02
96	59.83	CUBEBOL	0.20
97	60.83	SESQUITERPENOL	0.01
98	61.24	ISOCARYOPHYLLENE OXIDE	0.05
99	61.38	TERPENIC OXIDE	0.02
100	61.68	CARYOPHYLLENE OXIDE	0.38
101	61.70	SESQUITERPENIC OXIDE	0.07
102	64.35	TERPENIC COMPOUND	0.03
103	64.62	EPOXY-6,7-HUMULENE	0.04
104	64.86	KETONIC COMPOUND	0.02
105	65.72	Epi-CUBENOL	0.04
106	65.80	CAPRYLIC ACID	0.03
107	66.05	CUBENOL	0.04
108	66.60	SESQUITERPENIC OXIDE	0.02
109	66.90	ELEMOL	0.04
110	67.72	KETONIC COMPOUND	0.02
111	68.71	PENTADECANONE, TRIMETHYL-	0.01
112	70.21	EUDESMOL ISOMER	0.01
113	70.50	EUGENOL	0.01
114	72.08	alpha-MUUROLOL	0.01
115	72.71	4-VINYL-GUAIACOL	0.01
116	73.77	alpha-EUDESMOL	0.02
117	74.82	PHENOLIC COMPOUND	0.01

118	76.17	CAPRIC ACID	0.03
119	76.85	NERIC ACID	0.07
120	78.96	GERANIC ACID	0.23
121	79.05	ISOEUGENOL	0.41
122	80.27	DIETHYL PHTHALATE	0.02
123	80.77	SESQUITERPENIC OXIDE	0.02
124	81.39	AROMATIC COMPOUND	0.02
125	93.22	AROMATIC COMPOUND	0.03
126	102.96	PALMITIC ACID	0.05
127	110.30	ACID COMPOUND	0.02
128	113.00	OLEIC ACID	0.08
129	115.68	LINOLEIC ACID	0.03
		TOTAL	**99.83**

In the source report, peak 35 (ISOLEDENE) is listed without RT or %; it co-elutes with an adjacent peak.

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