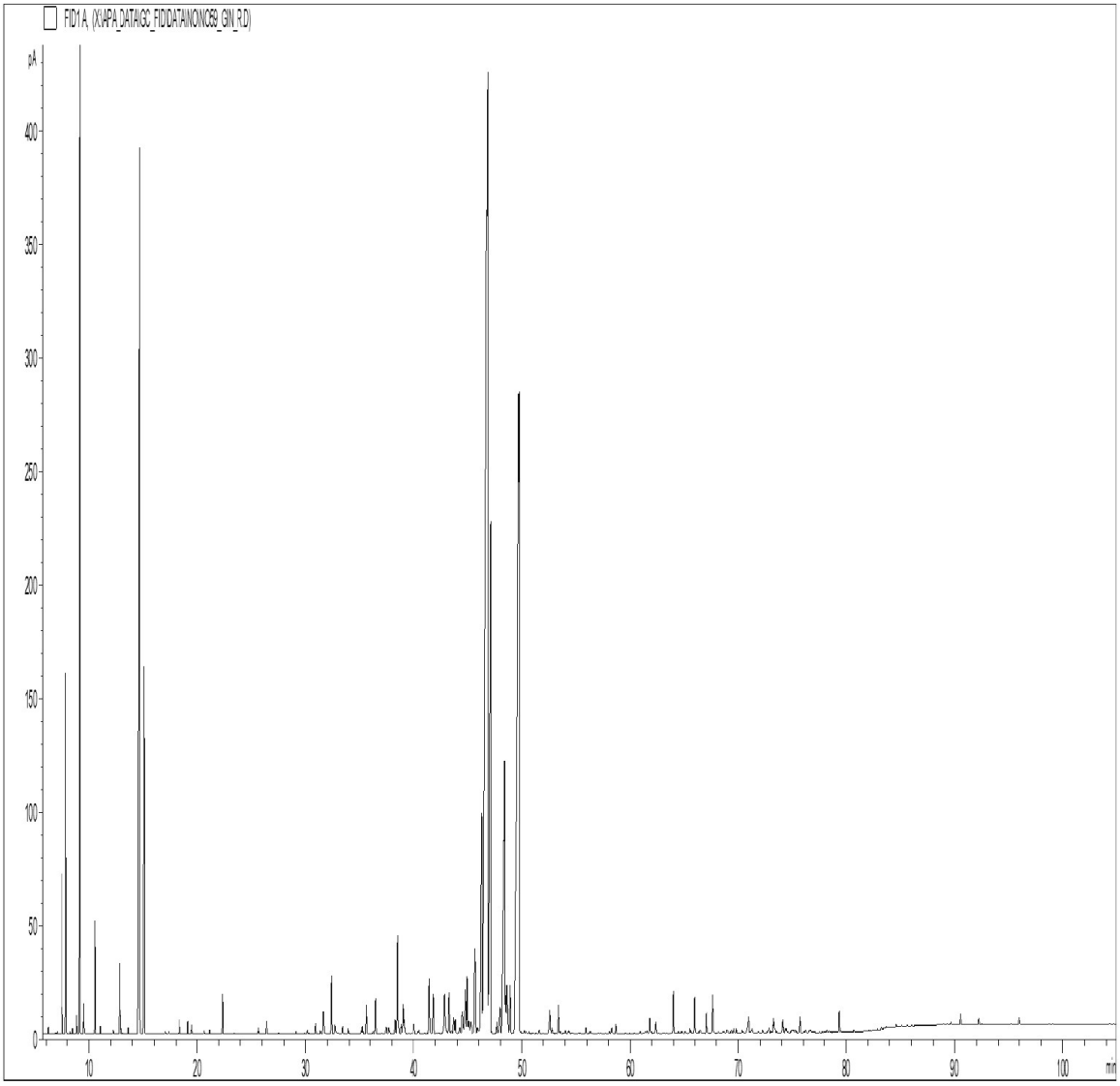
MALIKA ESSENTIALS

GC/MS ANALYSIS REPORT

Product Name	Ginger Essential Oil
Botanical Name	Zingiber officinale
Analysis Date	February 6, 2026

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	6.21	TERPENIC COMPOUND	0.03
2	7.02	BORNYLENE	0.01
3	7.51	TRICYCLENE	0.76
4	7.87	alpha-PINENE	1.73
5	8.27	TOLUENE	0.01
6	8.48	beta-FENCHENE	0.03
7	8.86	alpha-FENCHENE	0.10
8	9.17	CAMPHENE	6.39
9	9.52	HEXANAL	0.18
10	10.55	beta-PINENE	0.62
11	11.04	SABINENE	0.04
12	12.21	delta3-CARENE	0.03
13	12.81	beta-MYRCENE	0.42
14	12.94	alpha-PHELLANDRENE	0.11
15	13.12	psi-LIMONENE	0.01
16	13.64	alpha-TERPINENE	0.02
17	13.65	2-HEPTANONE	0.02
18	14.69	LIMONENE	9.49

19	15.11	1,8-CINEOLE	3.01
20	–	beta-PHELLANDRENE	
21	17.03	gamma-TERPINENE	0.02
22	17.36	trans-beta-OCIMENE	0.01
23	18.37	p-CYMENE	0.09
24	19.13	TERPINOLENE	0.09
25	19.49	OCTANAL	0.06
26	20.64	1,3,7-NONATRIENE, 4,8-DIMETHYL-	0.02
27	21.13	2-HEPTANOL	0.03
28	22.32	5-HEPTEN-2-ONE, 6-METHYL-	0.28
29	25.65	2-NONANONE	0.05
30	26.40	ROSEFURAN	0.09
31	27.49	PERILLENE	0.02
32	29.10	LIMONENE cis-1,2-EPOXIDE	0.02
33	30.21	alpha-CUBEBENE	0.04
34	30.94	delta-ELEMENE	0.09
35	31.37	CITRONELLAL	0.03
36	31.65	ISOLEDENE	0.25
37	32.40	alpha-COPAENE	0.49
38	32.70	DECANAL	0.09
39	33.40	CAMPHOR	0.06
40	33.91	2-NONANOL	0.04
41	35.17	BERGAMOTENE ISOMER	0.03
42	35.28	beta1-CUBEBENE	0.07
43	35.64	LINALOOL	0.21
44	36.23	ALIPHATIC ESTER	0.02
45	36.48	alpha-cis-BERGAMOTENE	0.31
46	37.03	SESQUITERPENE	0.01
47	37.45	SESQUITERPENE	0.08
48	37.68	BORNYL ACETATE	0.06
49	37.76	SESQUITERPENE	0.02
50	38.27	alpha-trans-BERGAMOTENE	0.14
51	38.49	beta-ELEMENE	0.89
52	38.50	beta-CUBEBENE	0.05
53	38.84	beta-CARYOPHYLLENE	0.09
54	39.00	2-UNDECANONE	0.21
55	39.01	TERPINENE-4-OL	0.04
56	39.10	ROSEFURAN OXIDE	0.11
57	39.14	OXIDE COMPOUND	0.05
58	39.77	SESQUITERPENE	0.01
59	40.03	SESQUITERPENE	0.11
60	40.42	MYRTENAL	0.02
61	40.52	SESQUITERPENE	0.03
62	41.02	SESQUITERPENE	0.02
63	41.45	GERMACRENE A	0.51
64	41.82	ALLO-AROMADENDRENE	0.41
65	42.84	FARNESENE ISOMER	0.54
66	43.25	E-beta-FARNESENE	0.44
67	43.47	SESQUITERPENE	0.04
68	43.68	gamma-SELINENE	0.18
69	43.84	NERAL	0.13
70	44.23	SESQUITERPENE	0.07
71	44.47	gamma-MUUROLENE	0.30
72	44.75	alpha-TERPINEOL	0.50
73	44.90	BORNEOL	0.50
74	45.05	SESQUITERPENE	0.16
75	45.25	SESQUITERPENE	0.19

76	45.69	GERMACRENE D	1.10
77	45.92	SESQUITERPENE	0.08
78	46.31	SESQUITERPENE	2.98
79	46.87	alpha-ZINGIBERENE	28.58
80	47.13	beta-BISABOLENE	6.31
81	47.14	GERANIAL	0.24
82	47.17	SESQUITERPENE	0.01
83	47.68	SESQUITERPENE	0.09
84	47.97	SESQUITERPENE	0.36
85	48.39	E,E-alpha-FARNESENE	4.79
86	48.48	SESQUITERPENE	0.26
87	41.10	CITRONELLOL	0.37
88	42.51	beta-SESQUIPHELLANDRENE	11.58
89	42.56	alpha-CURCUMENE	6.85
90	42.78	SESQUITERPENE	0.03
91	50.20	COMPOUND Mw=202	0.03
92	50.35	SESQUITERPENE	0.01
93	50.63	AROMATIC COMPOUND	0.01
94	51.07	SESQUITERPENE	0.01
95	51.63	MENTHADIENOL ISOMER	0.04
96	52.58	GERMACRENE B	0.26
97	52.78	CALAMENENE ISOMER	0.05
98	53.38	GERANIOL	0.25
99	53.55	COMPOUND Mw=202	0.02
100	53.89	OXIDE COMPOUND	0.02
101	54.02	E-GERANYL ACETONE	0.03
102	54.24	ALIPHATIC ESTER	0.01
103	54.34	cis-CARVEOL	0.03
104	55.88	Epi-CUBEBOL	0.05
105	56.18	SESQUITERPENIC COMPOUND	0.02
106	56.36	COMPOUND Mw=218	0.02
107	57.30	beta-CALACORENE	0.01
108	58.10	SESQUITERPENIC COMPOUND	0.02
109	58.30	SESQUITERPENIC COMPOUND	0.06
110	58.69	CUBEBOL	0.08
111	61.55	AROMATIC COMPOUND	0.02
112	61.85	7-epi-SESQUISABINENE HYDRATE	0.14
113	61.96	COMPOUND Mw=220	0.02
114	62.41	COMPOUND Mw=202	0.13
115	63.10	COMPOUND Mw=220	0.02
116	64.00	NEROLIDOL	0.34
117	64.45	SESQUITERPENIC COMPOUND	0.02
118	64.83	AROMATIC COMPOUND	0.02
119	65.08	AROMATIC COMPOUND	0.02
120	65.52	COMPOUND Mw=214	0.04
121	65.94	ELEMOL	0.32
122	66.44	AROMATIC COMPOUND	0.05
123	67.02	SESQUITERPENIC COMPOUND	0.18
124	67.12	10-epi-gamma-EUDESMOL	0.06
125	67.65	beta-SESQUIPHELLANDROL	0.36
126	68.17	SESQUITERPENIC COMPOUND	0.01

127	68.70	SESQUITERPENIC COMPOUND	0.01
128	68.94	AROMATIC COMPOUND	0.02
129	69.00	SESQUITERPENOL	0.02
130	69.39	SESQUITERPENOL	0.02
131	69.57	beta-BISABOLOL	0.04
132	69.80	MINT SULFIDE	0.03
133	70.33	gamma-EUDESMOL	0.03
134	70.44	T-CADINOL	0.01
135	70.92	SESQUITERPENIC COMPOUND	0.05
136	70.93	COMPOUND Mw=222	0.18
137	71.24	SESQUITERPENIC COMPOUND	0.05
138	71.84	alpha-MUUROLOL	0.01
139	72.23	SESQUITERPENIC COMPOUND	0.03
140	72.87	alpha-EUDESMOL	0.07
141	73.06	COMPOUND Mw=232	0.01
142	73.27	beta-EUDESMOL	0.20
143	74.13	COMPOUND Mw=220	0.14
144	74.34	COMPOUND Mw=220	0.03
145	74.46	COMPOUND Mw=220	0.04
146	74.99	AROMATIC COMPOUND	0.05
147	75.13	COMPOUND Mw=220	0.03
148	75.30	COMPOUND Mw=220	0.03
149	75.70	SESQUITERPENIC COMPOUND	0.15
150	76.22	COMPOUND Mw=220	0.03
151	76.53	COMPOUND Mw=220	0.02
152	76.66	GERANYL-p-CYMENE	0.04
153	76.84	AROMATIC COMPOUND	0.01
154	76.88	COMPOUND Mw=220	0.01
155	78.22	AROMATIC COMPOUND	0.02
156	78.45	COMPOUND Mw=220	0.02
157	79.35	ZINGIBERENOL	0.20
158	80.69	COMPOUND Mw=236	0.02
159	83.18	ALIPHATIC ESTER	0.01
160	89.67	XANTHORRHIZOL	0.02
161	90.56	ACORENONE	0.08
162	92.22	ZINGERONE	0.06
163	95.98	ZINGIBEROL	0.07
		TOTAL	**99.83**

In the source report, peak 20 (beta-PHELLANDRENE) 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.