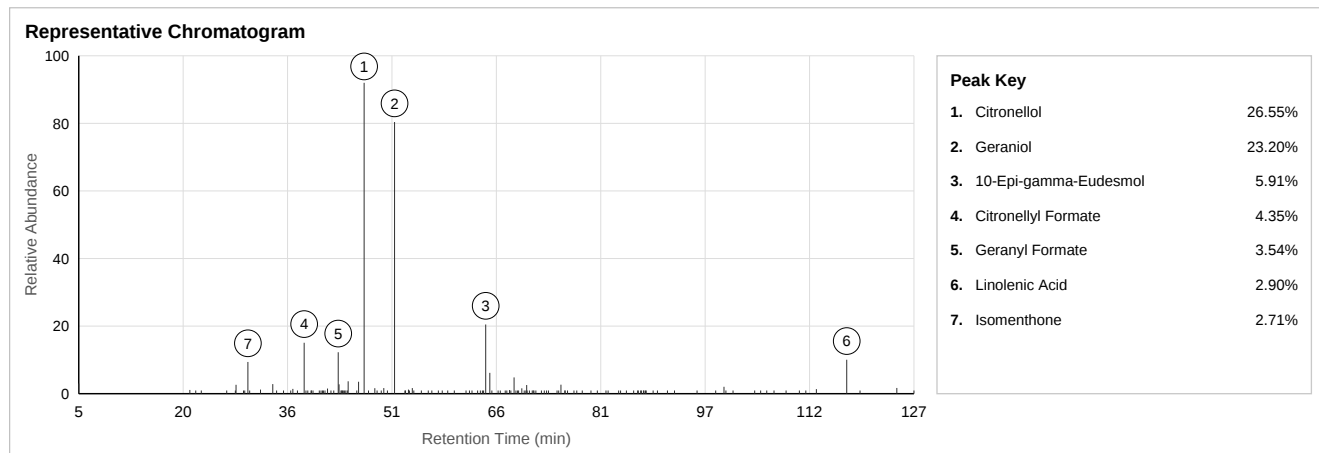


GC-MS Composition Profile

Product Name	Geranium Bourbon
Botanical Name	Pelargonium graveolens
INCI Name	Pelargonium Graveolens Flower Oil
Country of Origin	Madagascar
CAS Number	90082-51-2 / 8000-46-2
Analysis Date	December 19, 2025
Profile Type	Typical / representative composition profile; natural lots may vary.

Representative Chromatogram



Peak Composition Table

Peak	RT (min)	Compound	Typical %
1	5.18	Ethanol	0.87
2	21.39	Rose Cis-Oxide	0.32
3	22.25	Rose Trans-Oxide	0.14
4	23.06	3-Hexen-1-ol	0.07
5	26.77	Linalool Cis-Oxide	0.06
6	28.03	alpha-Cubebene	0.12
7	28.13	Menthone	0.76
8	29.22	Citronellal	0.15
9	29.40	Ylangene	0.05
10	29.86	Isomenthone	2.71
11	30.12	alpha-Copaene	0.18
12	31.70	beta-Bourbonene	0.35
13	33.49	Linalool	0.82
14	34.05	Linalyl Acetate	0.07
15	35.06	Epsilon-Cadinene	0.09
16	36.11	beta-Elementene	0.14
18	36.42	beta-Caryophyllene	0.41
19	37.09	6,9-Guaiadiene	0.16
20	38.07	Citronellyl Formate	4.35
21	38.33	Neoisomenthol	0.13
22	38.60	Cadina-3,5-Diene	0.06
23	39.09	Germacrene A	0.06
24	39.12	Sesquiterpene	0.05
25	39.36	Allo-Aromadendrene	0.07
26	40.28	Zonarene	0.12
27	40.53	Citronellyl Acetate	0.17
28	40.74	alpha-Humulene	0.13
29	40.88	Neryl Formate	0.11
30	41.11	Sesquiterpene	0.05
31	41.48	Neral	0.44

Peak	RT (min)	Compound	Typical %
32	41.98	gamma-Murolene	0.15
33	42.39	alpha-Terpineol	0.10
34	43.04	Geranyl Formate	3.54
35	43.16	Germacrene D	0.80
36	43.44	Sesquiterpene	0.06
37	43.54	Sesquiterpene	0.07
38	43.67	beta-Selinene	0.11
39	43.78	Sesquiterpene	0.05
40	43.97	Piperitone	0.05
41	44.15	alpha-Murolene	0.08
42	44.37	Citronellyl Propionate	0.19
43	44.49	Geranial	1.06
45	45.75	E,E-alpha-Farnesene	0.07
46	46.01	Geranyl Acetate	1.02
48	46.82	Citronellol	26.55
49	47.46	Cadina-1,4-Diene	0.12
50	48.38	Nerol	0.47
51	48.71	Citronellyl Butyrate	0.21
52	49.32	Geranyl Propionate	0.15
53	49.69	Neryl Isobutyrate	0.48
54	50.22	Calamenene	0.13
55	51.26	Geraniol	23.20
56	52.77	2-Phenylethyl Isobutyrate	0.06
57	52.86	2-Phenylethyl Butyrate	0.05
58	53.29	alpha-Agarofuran	0.35
59	53.43	Epi-Cubebol	0.05
60	53.85	Geranyl Butyrate	0.48
61	54.07	Neryl Methylbutyrate	0.23
63	55.17	Geranyl Methylbutyrate	0.06
64	56.18	Cubebol	0.22
65	56.70	Sesquiterpenic Oxide	0.10
66	57.65	Phenylethyl Ester	0.04
67	58.22	Caryophyllene Oxide	0.16
68	59.02	Geranic Ester	0.12
69	59.98	Citronellyl Tiglate	0.27
70	61.69	Geranyl Valerate	0.18
71	62.19	Epi-Cubenol	0.26
72	62.56	Cubenol	0.09
73	63.38	Elemol	0.21
74	63.78	Sesquiterpenol	0.08
75	64.08	Geranyl Caproate	0.07
76	64.25	Citronellic Ester	0.09
77	64.56	10-Epi-gamma-Eudesmol	5.91
78	65.16	Geranyl Tiglate	1.78
79	65.46	Spathulenol	0.17
80	66.37	7-Epi-beta-Eudesmol	0.06
81	66.69	Sesquiterpenol	0.07
82	67.41	Aliphatic Ester	0.05
83	67.64	Aliphatic Ester	0.09
84	68.03	Hinesol	0.31
85	68.23	Sesquiterpenol	0.09
86	68.70	2-Phenylethyl Tiglate	1.39
87	68.97	Neric Ester	0.16
88	69.21	Aliphatic Ester	0.24
89	69.36	Sesquiterpenic Oxide	0.17
90	69.83	Valerianol	0.46
91	70.18	alpha-Eudesmol	0.08
92	70.42	Aliphatic Ester	0.06
93	70.54	beta-Eudesmol	0.74
95	70.60	Compound Mw=262	0.26

Peak	RT (min)	Compound	Typical %
96	70.94	Aromatic Compound	0.07
97	71.35	Geranic Ester	0.05
98	71.50	Citronellic Acid	0.10
99	71.60	Aromatic Compound	0.04
100	71.88	Sesquiterpenic Oxide	0.05
101	72.69	Aromatic Compound	0.05
102	73.11	Sesquiterpenol	0.08
103	73.44	Alken Compound	0.18
104	73.72	Neric Acid	0.14
105	74.97	Sesquiterpenic Oxide	0.07
106	75.21	Sesquiterpenic Oxide	0.05
107	75.54	Geranic Acid	0.77
108	76.10	Sesquiterpenic Oxide	0.06
109	76.16	Sesquiterpenic Oxide	0.05
110	76.50	Compound Mw=222	0.10
111	77.44	Sesquiterpenol	0.08
112	77.85	Aliphatic Ester	0.05
113	78.65	Aliphatic Ester	0.04
114	79.92	Aliphatic Compound	0.10
115	80.85	Sesquiterpenic Compound	0.04
116	82.11	Aromatic Compound	0.07
117	82.42	Sesquiterpenic Compound	0.06
118	83.96	Sesquiterpenic Compound	0.08
119	84.24	Aliphatic Alcohol	0.08
120	85.09	Sesquiterpenic Oxide	0.08
121	86.15	Sesquiterpenic Compound	0.04
122	86.73	Sesquiterpenic Compound	0.04
123	86.83	Aromatic Compound	0.12
124	87.17	Sesquiterpenic Compound	0.04
125	87.28	Ethyl Linolenate	0.05
126	87.58	Phytol	0.06
127	87.66	Sesquiterpenic Compound	0.06
128	87.88	Aromatic Compound	0.05
129	87.98	Sesquiterpenol	0.08
130	88.99	Aromatic Compound	0.06
131	89.62	Sesquiterpenol	0.13
132	91.08	Acid Compound	0.07
133	92.11	Sesquiterpenol	0.06
134	95.40	Compound Mw=220	0.09
135	98.12	Sesquiterpenic Compound	0.05
136	99.33	Palmitic Acid	0.59
137	99.61	Compound Mw=218	0.07
138	100.65	Sesquiterpenic Oxide	0.05
139	103.81	Sesquiterpenic Compound	0.16
140	104.68	Aliphatic Alcohol	0.07
141	105.57	Aliphatic Ester	0.22
142	106.63	Sesquiterpenic Compound	0.08
143	108.39	Sesquiterpenic Compound	0.15
144	110.33	Sesquiterpenic Compound	0.06
145	111.27	Di-Ethyl-Hexyl-Phthalate	0.09
146	112.81	Linoleic Acid	0.39
147	117.24	Linolenic Acid	2.90
148	119.18	Sesquiterpenic Compound	0.12
149	124.55	Ketonic Compound	0.49
150	127.05	Sesquiterpenic Compound	0.11

Percentages are presented as a typical composition profile prepared from current reliable source data. Small analytical and natural lot-to-lot variation is expected.