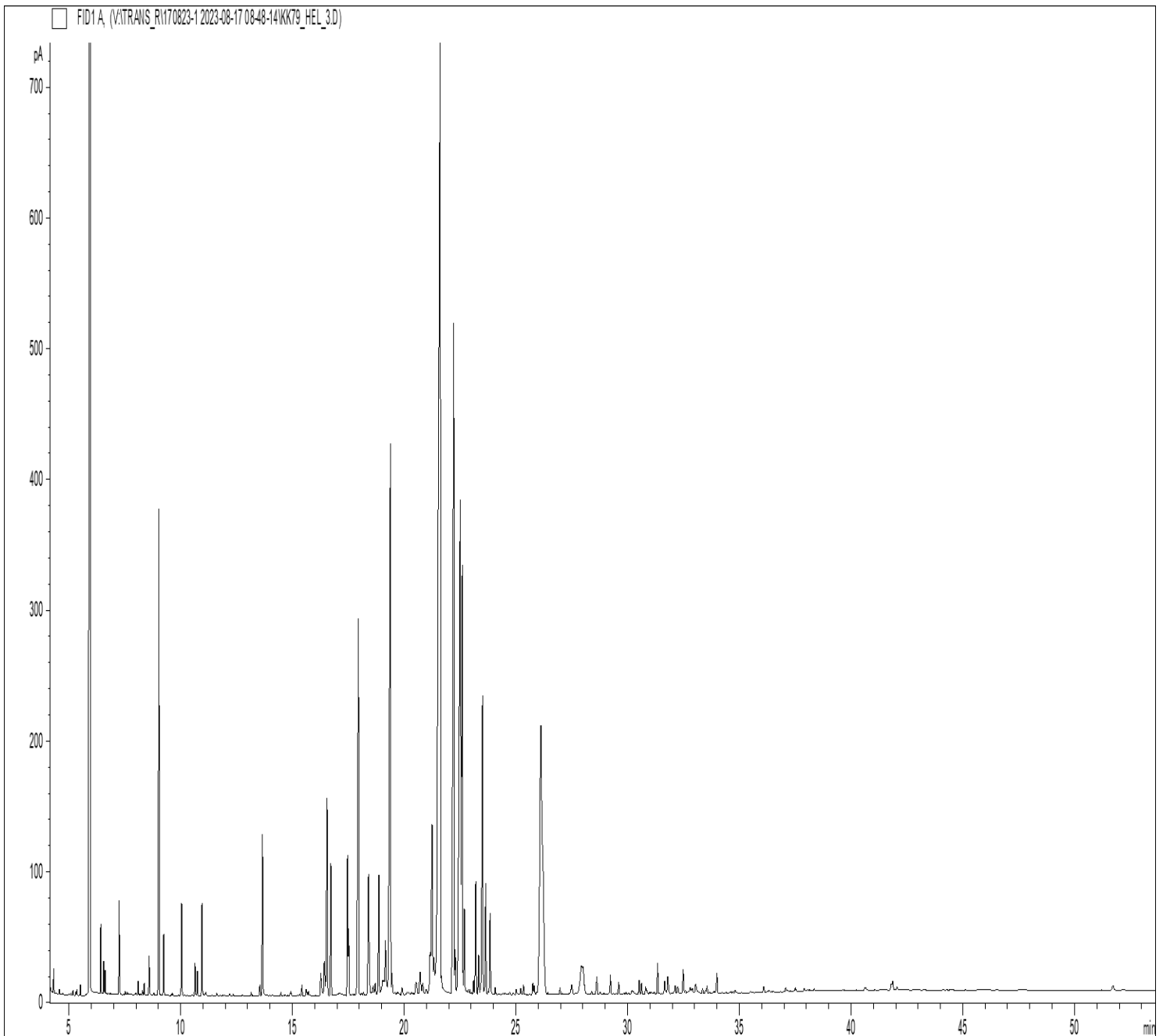


GCMS ANALYSIS

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

DATE: August 30, 2023



Due to volume turnover, this report is not lot specific, It is representative of the quality of this oil produced by the manufacturer of this product, Specific lots may vary slightly as is the case in natural products,

GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
1	4.32	2-HEPTENE, 2-METHYL-	0.10
2	4.57	NONANE	0.02
3	5.19	PROPANONE ISOMER	0.02
4	5.30	3-PENTANONE	0.02
5	5.36	BORNYLENE	0.03
6	5.52	3-PENTANONE, 2-METHYL-	0.05
7	5.95	alpha-PINENE	21.39
8	6.42	alpha-FENCHENE	0.32
9	6.56	CAMPHENE	0.15
10	6.62	3-HEXANONE, 4-METHYL-	0.11
11	7.25	beta-PINENE	0.46
12	7.52	PINADIENE	0.02
13	7.62	delta2-CARENE	0.01
14	8.01	TERPENE ISOMER	0.01
15	8.11	beta-MYRCENE	0.07
16	8.29	alpha-PHELLANDRENE	0.02
17	8.37	ISOBUTYL 2-METHYLBUTYRATE	0.06
18	8.59	alpha-TERPINENE	0.21
19	8.80	ALIPHATIC ESTER	0.02
20	9.03	LIMONENE	2.81
21	9.25	1,8-CINEOLE	0.32
22	9.64	cis-beta-OCIMENE	0.01
23	10.05	gamma-TERPINENE	0.44
24	10.06	trans-beta-OCIMENE	0.07
25	10.65	p-CYMENE	0.18
26	10.75	2-METHYLBUTYL 2-METHYLBUTYRATE	0.13
27	10.96	TERPINOLENE	0.18
28	10.97	ISOBUTYL ANGELATE	0.32
29	11.02	AMYL ISOVALERATE	0.01
30	11.13	TRIDECANE	0.03

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
31	11.62	ALIPHATIC ESTER	0.02
32	12.20	5-HEPTEN-2-ONE, 6-METHYL-	0.02
33	12.36	1-HEXANOL	0.01
34	13.16	ALIPHATIC ESTER	0.02
35	13.55	2-NONANONE	0.08
36	13.67	2-METHYLBUTYL ANGELATE	0.97
37	13.70	TETRADECANE	0.05
38	14.50	HEXYL 2-METHYLBUTYRATE	0.02
39	14.94	METHYL-p-CRESOL	0.04
40	15.33	ALIPHATIC COMPOUND	0.01
41	15.43	ALIPHATIC ESTER	0.07
42	15.62	NERYL OXIDE	0.05
43	15.66	ALIPHATIC ESTER	0.02
44	15.73	ALIPHATIC ESTER	0.03
45	16.28	YLANGENE	0.24
46	16.44	SESQUITERPENE	0.32
47	16.56	alpha-COPAENE	1.60
48	16.73	ISOITALICENE	0.94
49	17.11	HEPTANE-3,5-DIONE, 2,4-DIMETHYL-	0.11
50	17.47	LINALOOL	0.86
51	17.53	ALIPHATIC ESTER	0.41
52	17.96	ITALICENE	3.39
53	18.08	SESQUITERPENE	0.02
54	18.19	alpha-CEDRENE	0.03
55	18.39	ITALICENE ISOMER	0.14
56	18.40	ITALICENE ISOMER	0.14
57	18.41	alpha-cis-BERGAMOTENE	0.91
58	18.56	CEDRENE ISOMER	0.04
59	18.62	FENCHOL	0.09
60	18.71	SESQUITERPENE	0.12

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GCMS ANALYSIS (cont'd,)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
61	18.88	alpha-trans-BERGAMOTENE	0.94
62	18.94	OCTANE-4,6-DIONE, 3,5-DIMETHYL-	0.70
63	19.04	2-UNDECANONE	0.02
64	19.17	TERPINENE-4-OL	0.31
65	19.39	beta-CARYOPHYLENE	5.72
66	19.46	6,9-GUAIADIENE	0.18
67	19.61	ALIPHATIC ESTER	0.01
68	19.71	HEXYL TIGLATE	0.03
69	19.91	SESQUITERPENE	0.06
70	20.13	SESQUITERPENE	0.04
71	20.20	SESQUITERPENE Mw=202	0.05
72	20.34	trans-PINOCARVEOL	0.04
73	20.41	SESQUITERPENE	0.02
74	20.53	ALLO-AROMADENDRENE	0.10
75	20.55	SESQUITERPENE	0.10
76	20.72	E-beta-FARNESENE	0.28
77	20.83	SESQUITERPENE	0.16
78	20.99	SESQUITERPENE	0.09
79	21.16	alpha-HUMULENE	0.37
80	21.25	gamma-SELINENE	1.87
81		CURCUMENE ISOMER	
82	21.33	CURCUMENE ISOMER	0.34
83	21.35	Z-beta-FARNESENE	0.30
84	21.60	alpha-TERPINEOL	0.26
85	21.61	gamma-CURCUMENE	15.29
86	21.67	SESQUITERPENE	0.22
87	22.22	NERYL ACETATE	6.48
88	22.29	SESQUITERPENE	0.33
89	22.51	beta-SELINENE	6.41

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
90	22.60	alpha-SELINENE	3.66
91	22.70	beta-CURCUMENE	0.66
92	22.88	SESQUITERPENE	0.03
93	23.01	SESQUITERPENE Mw=202	0.02
94	23.10	FARNESENE ISOMER	0.09
95	23.20	delta-CADINENE	0.83
96	23.33	gamma-CADINENE	0.29
97	23.43	7-epi-alpha-SELINENE	0.05
98	23.51	alpha-CURCUMENE	2.33
99	23.65	NERYL PROPIONATE	0.75
100	23.77	SESQUITERPENE	0.04
101	23.85	NEROL	0.60
102	24.08	alpha-AMORPHENE	0.07
103	24.43	ALIPHATIC ESTER	0.02
104	24.52	SESQUITERPENE	0.03
105	24.73	AROMATIC COMPOUND	0.03
106	24.89	SESQUITERPENE	0.02
107	25.02	CALAMENENE	0.06
108	25.22	COMPOUND Mw=220	0.06
109	25.34	NERYL ISOBUTYRATE	0.08
110	25.76	COMPOUND Mw=220	0.09
111	25.82	ALIPHATIC ESTER	0.07
112	26.12	ITALIDIONE I	6.61
113		ITALIDIONE II	
114	26.42	AROMATIC COMPOUND	0.02
115	26.76	AROMATIC COMPOUND	0.01
116	26.98	alpha-CALACORENE	0.05
117	27.07	AROMATIC COMPOUND	0.01
118	27.22	ALIPHATIC DIONE	0.01
119	27.50	ALIPHATIC DIONE	0.14
120	27.92	ITALIDIONE III	0.90

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
121	28.01	NERYL VALERATE	0.05
122	28.39	AROMATIC COMPOUND	0.03
123	28.62	CARYOPHYLLENE OXIDE	0.16
124	28.77	NERYL METHYLVALERATE	0.02
125	28.94	TERPENIC COMPOUND	0.01
126	29.23	NEROLIDOL	0.16
127	29.35	COMPOUND Mw=222	0.01
128	29.48	COMPOUND Mw=200	0.01
129	29.60	NERYL CAPROATE	0.09
130	29.84	COMPOUND Mw=200	0.02
131	29.93	CARYOPHYLLENOL	0.02
132	30.03	SESQUITERPENOL	0.02
133	30.19	CUBENOL	0.03
134	30.24	KETONIC COMPOUND	0.05
135	30.52	GUAIOL	0.10
136	30.62	COMPOUND Mw=235	0.08
137	30.81	2-PHENYLETHYL TIGLATE	0.06
138	30.83	SESQUITERPENOL	0.03
139	30.98	SESQUITERPENOL	0.02
140	31.06	SESQUITERPENOL	0.02
141	31.19	ALIPHATIC ESTER	0.02
142	31.34	EUDESMA-5-EN-11-alpha-OL	0.23
143	31.66	EUDESMOL ISOMER	0.13
144	31.79	beta-BISABOLOL	0.18
145		COMPOUND Mw=250	
146	32.13	SESQUITERPENOL	0.08
147	32.24	HINESOL	0.09
148	32.48	5-epi-7-epi-alpha-EUDESMOL	0.19
149	32.58	SESQUITERPENOL	0.03
150	32.71	SESQUITERPENOL	0.03

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
151	32.81	SESQUITERPENOL	0.08
152	32.89	SESQUITERPENOL	0.06
153	33.05	alpha-BISABOLOL	0.16
154	33.35	alpha-EUDESOL	0.04
155	33.48	alpha-CADINOL	0.03
156	33.55	beta-EUDESOL	0.06
157	33.66	SESQUITERPENOL	0.01
158	33.87	AROMATIC COMPOUND	0.02
159	33.99	EUDESMA-7(11)-EN-4-OL	0.16
160	34.22	COMPOUND Mw=220	0.01
161	34.63	cis-alpha-BISABOLOL	0.01
162	34.72	AROMATIC COMPOUND	0.01
163	34.82	CARYOPHYLLA-2,6-DIEN-5-alpha-OL	0.04
164	35.50	SESQUITERPENOL	0.02
165	36.09	ALIPHATIC DIONE	0.06
166	36.32	AROMATIC COMPOUND	0.02
167	37.07	ACID COMPOUND	0.05
168	37.51	ALIPHATIC DIONE	0.04
169	37.90	ALIPHATIC DIONE	0.03
170	38.05	ALIPHATIC DIONE	0.01
171	38.14	LAURIC ACID	0.01
172	38.34	ALIPHATIC DIONE	0.02
173	40.62	ALIPHATIC DIONE	0.02
174	40.65	ALIPHATIC DIONE	0.02
175	41.28	ALIPHATIC DIONE	0.01
176	41.80	ALIPHATIC DIONE	0.06
177	41.86	ALIPHATIC DIONE	0.09
178	42.06	ALIPHATIC DIONE	0.04
179	42.48	XANTHORRHIZOL	0.01
180	47.54	ALIPHATIC DIONE	0.02

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GCMS ANALYSIS (cont'd.)

PRODUCT NAME: HELICHRYSUM (SLOVENIA) ESSENTIAL OIL – 11068

Peak	RT (min)	Compound name	%
181	47.69	ALIPHATIC DIONE	0.02
182	51.71	SQUALENE	0.07
		TOTAL	99.93

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