

GC/MS & COA Helichrysum Oil

Product Organic Helichrysum Italicum -

Lot# 220671663 Appearance Fluid Liquid

Manufacturing date June, 2022

Retest date September, 2022

Color Light Yellow

Odor Conforms to Standard

Physico-Chemical Properties:

Properties	Results
Refractive Index @ 20°C	1.4791
Specific Gravity @ 20°C	0.8999
Optical Rotation @ 20°C	1.520

Peak	Compound	RT	Area Sum %
1	4-Methyl-3-hexanone	5.31	0.11
2	Bornylene	7.535	0.04
3	α-Thujene	8.58	0.01
4	α-Pinene	8.89	16.41
5	Camphene	9.46	0.62
6	β-Pinene	11.036	0.52
7	β-Myrcene	12.194	0.11
8	unknown	12.569	0.03
9	α-Phellandrene	12.797	0.03
10	Isobutyl 2-methylbutyrate	13.01	0.04
11	α-Terpinene	13.602	0.14
12	p-Cymene	14.137	0.19
13	Limonene	14.407	3.68
14	1,8-Cineole	14.476	0.23
15	(Z)-β-Ocimene	15.349	0.02
16	(E)- β-Ocimene	16.037	0.06
17	Isobutyl angelate	16.376	0.29
18	y-Terpinene	16.567	0.42
19	α-Terpinolene	18.717	0.15
20	Linalool	19.887	0.78
21	2-Methylbutyl 2-methylbutyrate	20.305	0.13
22	endo-Fenchol	20.517	0.04
23	trans-Pinocarveol	22.373	0.05
24	Camphor	22.696	0.02
25	Isoamyl angelate	24.306	0.79
26	Borneol	24.609	0.06
27	Terpinen-4-ol	25.627	0.19
28	α-Terpineol	26.802	0.39
29	Dimethyl octanedione isomer	26.842	0.29
30	2-methylbutyl tiglate	27.813	0.03
31	Nerol	30.265	1.09
32	4,6-Dimethyloctane-3,5-dione	30.526	0.08
33	Piperitone oxide	32.138	0.13
34	unknown	32.588	0.04
35	unknown	32.801	0.1
36	3-Methylamyl angelate	33.241	0.04
37	Hexyl angelate	35.352	0.21
38	Tridecane	36.45	0.12
39	Cyclosativene II	40.825	0.21
40	α-Ylangene	41.382	0.13
41	α-Copaene + Neryl acetate	41.975	16.83
42	unknown	43.153	0.16
43	Isoitalicene	43.367	0.18
44	Italicene	43.845	3.28
45	unknown	44.122	0.07

46	β-Caryophyllene	45.053	5.94
47	trans-α-Bergamotene	46.793	1
48	unknown	47.143	0.11
49	Italdione	47.511	2.51
50	α-Humulene	47.612	0.15
51	Aromandendrene	48.177	0.06
52	α-Acoradiene	48.542	0.26
53	β-Acoradiene	48.935	2.36
54	y-Selinene	49.625	2.2
55	β-Selinene	50.31	11.92
56	γ-Curcumene	50.458	6.97
57	Ar-Curcumene	50.667	2.55
58	unknown	50.789	1.03
59	α-Selinene	51.061	5.92
60	unknown	51.186	1.1
61	α-Muurolene	51.659	0.19
62	unknown	52.124	0.16
63	γ-Cadinene	52.53	0.52
64	β-Curcumene	52.814	0.38
65	Italidione II isomer	53.021	0.3
66	δ-Cadinene	53.412	0.59
67	Italicene ether	53.889	0.21
68	(E)-γ-Bisabolene	54.22	0.07
69	α-Cadinene	54.272	0.03
70	α-Calacorene	54.59	0.06
71	Phenylethyl tiglate	54.772	0.05
72	(E)-α-Bisabolene	55.174	0.1
73	Caryophyllene oxide	57.238	0.18
74	Italidione III isomer	57.601	0.58
75	Italidione III isomer II	58.051	0.67
76	unknown	58.581	0.18
77	unknown	58.822	0.21
78	Rosifoliol analog	59.171	0.79
79	Selin-11-en-4α-ol analog	59.6	0.12
80	unknown	60.638	0.1
81	1,10-Diepicubenol	61.001	0.06
82	unknown	61.212	0.1
83	unknown	61.635	0.19
84	τ-Cadinol	61.712	0.04
85	β-Eudesmol	61.982	0.1
86	Selin-11-en-4α-ol	62.212	0.4
87	unknown	63.08	0.12
88	unknown	63.945	0.12
89	unknown	64.674	0.24
90	unknown	65.086	0.03
91	unknown	65.165	0.07
92	unknown	65.431	0.17

93	unknown	65.64	0.05
94	unknown	65.752	0.05
95	unknown	66.329	0.04
96	unknown	71.05	0.11
	Total identified		95.42%

CONCLUSION: No adulterant or contaminant has been detected in this oil.

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