



CERTIFICATE of ANALYSIS (COA)

COMMON NAME	Chamomile, Roman
LATIN NAME	<i>Anthemis nobilis</i>
COUNTRY OF ORIGIN	USA
CULTIVATION METHOD	Conventional
TYPE	Essential Oil
EXTRACTION METHOD	Steam Distilled
PLANT PART	Flowers
USE	Aromatherapy, Natural Perfumery.

SKU	205
LOT #	17
MANUFACTURING DATE	August 2021
RETEST	August 2024

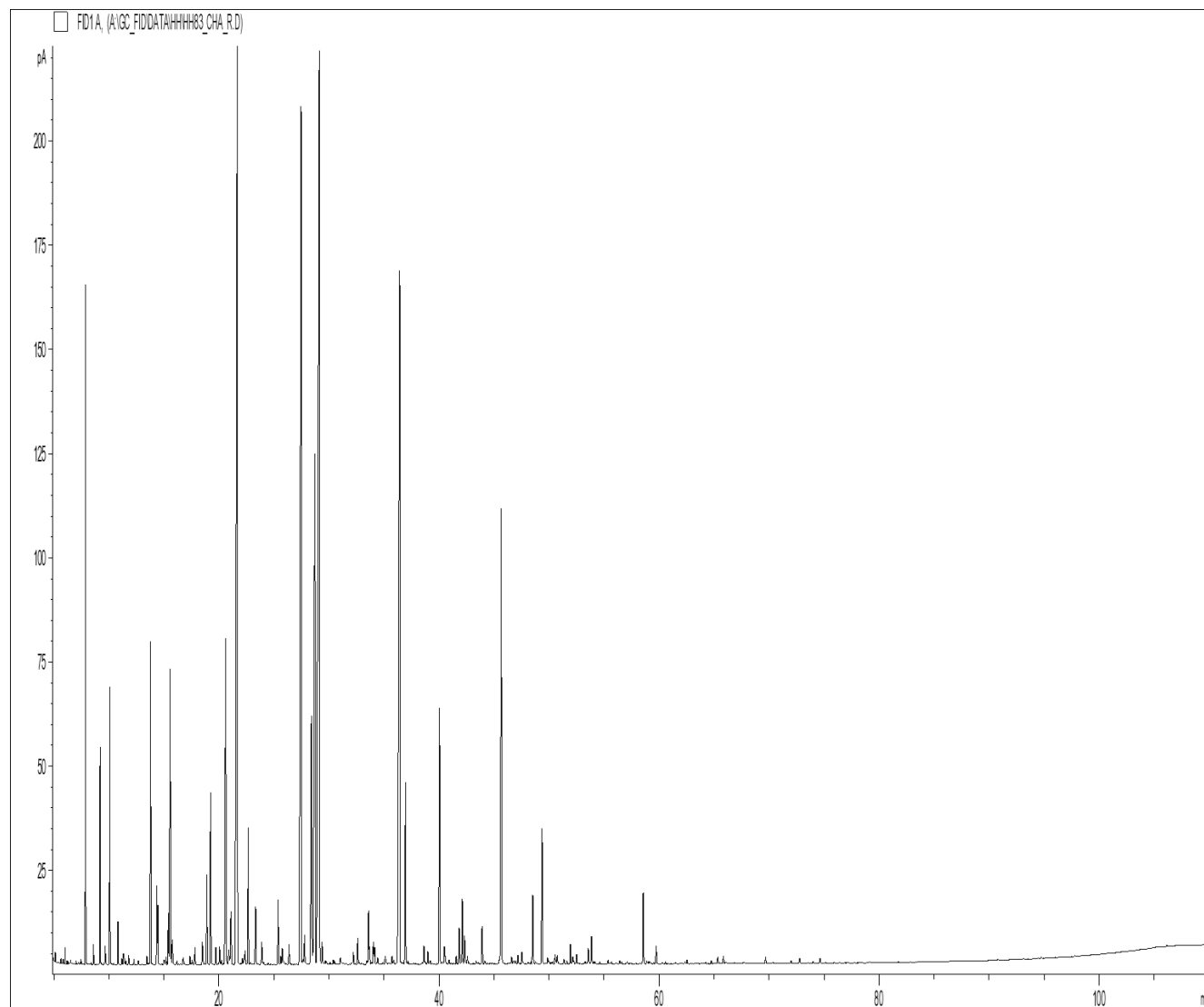
	SPECIFICATIONS (Range)	
SPECIFIC GRAVITY @20°C	0.892 - 0.910	na
REFRACTIVE INDEX @20°C	1.440 - 1.450	1.4432
OPTICAL ROTATION @20°C	-2° to -3°	na

PHYSICAL APPEARANCE	Transparent liquid	Conforms
COLOR	Ranges from colorless to pale yellow. Oil can be light blue or green when freshly distilled.	Conforms
ODOR	Sweet, fruity, warm and herbaceous.	Conforms
SOLUBILITY	Soluble in alcohol and fixed oils	
SPECIAL USE INSTRUCTIONS	Dilute before use	

PRIMARY CONSTITUENTS	Isoamyl angelate, Isobutyl angelate.
----------------------	--------------------------------------

THIRD PARTY LAB ANALYSIS (GCMS)

Chromatographic profile:



Identification results: CHAMOMILE ROMAN - BATCH N° 205 LOT 17

Peaks	RT (min)	Compound name	%	Norm (%)	Allergens (%)
1	5.81	ALIPHATIC ALCOHOL	0.02		
2	5.85	ISOVALERALDEHYDE	0.02		
3	6.02	2-BUTANONE, 3-METHYL-	0.06		
4	6.20	2-PENTANONE	0.02		
5	6.29	FURAN, 2-ETHYL-	0.01		
6	6.38	ALIPHATIC ESTER	0.01		
7	7.04	ISOBUTYL ACETATE	0.02		
8	7.45	TRICYCLEN	0.02		
9	7.88	alpha-PINENE	3.23	1 - 5	
10	8.38	ALIPHATIC ESTER	0.01		
11	8.60	PROPYL ISOBUTYRATE	0.11		
12	9.21	CAMPHE	1.21		
13	9.66	ISOBUTANOL	0.08		
14	9.67	HEXANAL	0.05		
15	10.08	ISOBUTYL ISOBUTYRATE	1.62	2 - 9	
16	10.83	beta-PINENE	0.27		
17	11.33	METHYL ANGELATE	0.12		
18	11.40	SABINENE	0.02		
19	11.54	PINADIENE	0.03		
20	11.80	PROPYL METHACRYLATE	0.07		
21	12.28	PROPYL 2-METHYLBUTYRATE	0.03		
22	12.68	BUTYL ISOBUTYRATE	0.03		
23	13.45	ETHYL ANGELATE	0.06		
24	13.59	beta-MYRCENE	0.01		
25	13.79	ISOBUTYL METHACRYLATE	2.26	0.5 - 3.0	
26	14.36	ISOBUTYL 2-METHYLBUTYRATE	0.55		
27	14.45	ISOBUTYRIC ANHYDRID	0.39		
28	15.01	AMYL PROPIONATE	0.03		
29	15.04	1,8-CINEOLE, 2,3-DEHYDRO-	0.03		
30	15.20	ISOBUTYL ISOVALERATE	0.05		
31	15.40	ISOAMYL ISOBUTYRATE	0.40	< 1.0	
32	15.56	2-METHYLBUTYL ISOBUTYRATE	2.24	2 - 5	
33	15.74	LIMONENE	0.25		0.25
34	16.18	1,8-CINEOLE	0.03		
35	16.74	2-HEXENAL	0.07		
36	17.35	BUTYL METHACRYLATE	0.07		
37	17.55	FURAN, 2-PENTYL-	0.04		
38	17.82	ALIPHATIC ESTER	0.13		
39	18.49	PRENYL ACETATE	0.20		
40	18.90	ISOPROPYL ANGELATE	0.68		
41	19.24	ALLYL METHACRYLATE	1.26		
42	19.71	3-HEPTANONE, 2,6-DIMETHYL-	0.13		
43	20.05	p-CYMENE	0.14		
44	20.23	3-PENTEN-2-OL	0.03		
45	20.39	ALIPHATIC ESTER	0.01		
46	20.61	2-METHYLBUTYL METHACRYLATE	3.52	0.5 - 1.5	
47		ISOAMYL METHACRYLATE		< 1.0	
48	20.88	ISOAMYL ISOVALERATE	0.16		
49	21.09	2-METHYLBUTYL 2-METHYLBUTYRATE	0.59		
50	21.68	ISOBUTYL ANGELATE	14.29	30 - 45	

Identification results : CHAMOMILE ROMAN - BATCH N° 205 LOT 17

Peaks	RT (min)	Compound name	%	Norm (%)	Allergens (%)
51	22.13	AMYL ISOVALERATE	0.06		
52	22.26	ALIPHATIC ESTER	0.02		
53	22.37	ALIPHATIC ESTER	0.14		
54	22.66	HEXYL METHYLPROPIONATE	1.04		
55	22.88	2-HEXEN-1-OL ACETATE	0.02		
56	23.34	ISOPRENYL ISOVALERATE	0.53		
57	23.90	ALIPHATIC ALCOHOL	0.20		
58	24.05	TRIDECANE	0.02		
59	24.49	1-PENTANOL, 3-METHYL-	0.01		
60	25.38	BUTYL ANGELATE	0.51		
61	25.61	ALIPHATIC ESTER	0.06		
62	25.75	1-HEXANOL	0.16		
63	26.37	ISOBUTYL TIGLATE	0.17		
64	27.46	METHALLYL ANGELATE	10.52	6 - 10	
65	27.64	ALIPHATIC ESTER	0.05		
66	27.77	3-HEXEN-1-OL	0.26		
67	28.40	METHYLAMYL METHACRYLATE ISOMER	2.78		
68	28.73	ISOAMYL ANGELATE	6.48	3 - 7	
69	29.12	2-METHYLBUTYL ANGELATE	14.39	12 - 22	
70	29.19	ALIPHATIC ESTER	0.09		
71	29.37	2-HEXEN-1-OL	0.19		
72	29.68	ALIPHATIC ESTER	0.05		
73	29.79	ALIPHATIC ESTER	0.02		
74	30.10	ISOPENTYL METHACRYLATE	0.02		
75	30.38	HEXYL BUTYRATE	0.04		
76	30.51	ALIPHATIC ESTER	0.03		
77	31.04	ALIPHATIC ESTER	0.05		
78	31.10	ALIPHATIC ESTER	0.01		
79	31.57	ALIPHATIC ESTER	0.01		
80	32.11	ALIPHATIC ESTER	0.02		
81	32.22	ALIPHATIC ESTER	0.10		
82	32.61	ALIPHATIC ESTER	0.11		
83	32.62	1-OCTEN-3-OL	0.10		
84	33.45	ALIPHATIC KETONE	0.04		
85	33.60	ARTEMISIA CETONE ISOMER	0.44		
86	33.68	ARTEMISIA CETONE ISOMER	0.13		
87	33.86	ALIPHATIC ESTER	0.02		
88	34.03	ALIPHATIC ESTER	0.22		
89	34.15	ALIPHATIC ESTER	0.14		
90	34.35	HEXENYLIC ESTER	0.02		
91	34.44	AMYL METHACRYLATE	0.06		
92	34.90	SESQUITERPENE	0.02		
93	35.12	alpha-COPAENE	0.10		
94	35.73	alpha-CAMPHOLENOL	0.07		
95	35.89	ALIPHATIC ESTER	0.04		
96	36.43	METHYLAMYL ANGELATE	9.64		
97	36.97	METHYLAMYL METHACRYLATE ISOMER	1.48		
98	37.20	KETONIC COMPOUND	0.02		
99	38.49	SESQUITERPENE	0.02		
100	38.65	ISOPINOCAMPHONE	0.17		

Identification results : CHAMOMILE ROMAN - BATCH N° 205 LOT 17

Peaks	RT (min)	Compound name	%	Norm (%)	Allergens (%)
101	39.00	HEXYL ANGELATE ISOMER	0.11		
102	40.06	PINOCARVONE	2.30	1.3 - 6.0	
103	40.32	ALIPHATIC ESTER	0.03		
104	40.50	ALIPHATIC ESTER	0.17		
105	40.58	ALIPHATIC ESTER	0.08		
106	40.93	epsilon-CADINENE	0.05		
107	41.58	ALIPHATIC ESTER	0.08		
108	41.84	ALIPHATIC ESTER	0.31		
109	42.13	CAMPHENE HYDRATE	0.60		
110	42.34	beta-CARYOPHYLLENE	0.26		
111	42.60	TERPINENE-4-OL	0.07		
112	43.39	ALIPHATIC ESTER	0.03		
113	43.59	KETONIC COMPOUND	0.02		
114	43.93	MYRTENAL	0.35		
115	44.17	ALIPHATIC ESTER	0.04		
116	44.87	cis-p-MENTHA-2,8-DIEN-1-OL	0.03		
117	45.49	ALIPHATIC ALCOHOL	0.04		
118	45.67	trans-PINOCARVEOL	4.29	2 - 7	
119	46.45	ISOBORNEOL	0.02		
120	46.61	cis-VERBENOL	0.06		
121	46.78	alpha-HUMULENE	0.03		
122	46.86	trans-VERBENOL	0.03		
123	47.19	Z-beta-FARNESENE	0.08		
124	47.54	ALIPHATIC ALCOHOL	0.12		
125	48.10	AROMATIC COMPOUND	0.02		
126	48.35	gamma-MUUROLENE	0.02		
127	48.54	BORNEOL	0.63		
128	48.79	alpha-TERPINEOL	0.03		
129	49.38	GERMACRENE D	1.27		
130	49.88	EREMOPHILENE	0.06		
131	49.98	BENZYL ACETATE	0.03		
132	50.18	MENTHADIENOL ISOMER	0.02		
133	50.34	alpha-MUUROLENE	0.02		
134	50.56	BICYCLOGERMACRENE	0.09		
135	50.77	ALIPHATIC ESTER	0.07		
136	51.37	SESQUITERPENE Mw=202	0.05		
137	51.64	delta-CADINENE	0.03		
138	51.95	E,E-alpha-FARNESENE	0.16		
139	52.18	ALIPHATIC ESTER	0.08		
140	52.28	ALIPHATIC ESTER	0.03		
141	52.52	PHENYLETHYLIC ESTER	0.09		
142	52.70	BENZYL ISOBUTYRATE	0.02		
143	53.58	ISOBUTYL 3-HYDROXY-2-METHYLENEBUTYRATE	0.16		
144	53.88	MYRTENOL	0.26		
145	54.17	MENTHADIENOL ISOMER	0.03		
146	54.62	ALIPHATIC ESTER	0.02		
147	55.38	PHENYLETHYLIC ESTER	0.04		
148	55.69	beta-DAMASCENONE	0.02		
149	56.43	2,4-DECADIENAL	0.03		
150	56.62	trans-CARVEOL	0.02		

Identification results: CHAMOMILE ROMAN - BATCH N° 205 LOT 17

Peaks	RT (min)	Compound name	%	Norm (%)	Allergens (%)
151	57.11	ALIPHATIC ALCOHOL	0.02		
152	57.37	AROMATIC COMPOUND	0.01		
153	58.58	2-HYDROXY-2-METHYLBUT-3-ENYL ANGELATE	0.58		
154	59.00	ALIPHATIC ALCOHOL	0.02		
155	59.16	BENZYL METHACRYLATE	0.02		
156	59.55	2-METHYLPROPYL BENZENE ACETATE	0.01		
157	59.75	ISOPENTYL 3-HYDROXY-2-METHYLENEBUTYRATE	0.17		
158	60.32	AROMATIC COMPOUND	0.02		
159	60.60	ALIPHATIC ESTER	0.02		
160	61.53	ALIPHATIC COMPOUND	0.02		
161	62.38	ALIPHATIC ESTER	0.02		
162	62.55	ALIPHATIC ESTER	0.03		
163	64.75	ALIPHATIC ESTER	0.03		
164	65.35	ALIPHATIC ESTER	0.07		
165	65.87	ALIPHATIC ESTER	0.07		
166	66.05	METHYLEUGENOL	0.01		
167	66.14	ALIPHATIC ESTER	0.01		
168	66.88	SESQUITERPENIC OXIDE	0.01		
169	67.72	PENTADECANAL	0.02		
170	69.70	ALIPHATIC ESTER	0.06		
171	70.36	PHENYLETHYLIC ESTER	0.01		
172	72.01	KETONIC COMPOUND	0.02		
173	72.79	PENTADECANONE, TRIMETHYL-	0.04		
174	74.03	SESQUITERPENIC OXIDE	0.02		
175	74.64	5-epi-7-epi-alpha-EUDESOL	0.05		
176	94.75	PHYTOL	0.01		
		TOTAL	99.38		0.25

This Essential Oil is a 100% pure and natural product. It does not contain any artificial ingredients or adulteration of any kind to the best of our knowledge. The analysis and statements herein constitute the most complete information available to Eden Botanicals. This product is guaranteed by Eden Botanicals to be of excellent quality.

Eden Botanicals

www.edenbotanicals.com

info@edenbotanicals.com

T: 1-707-509-0041 / F: 1-707-949-2526

Document created: 09.10.18

Document updated: 04.13.22