

Date : 2024-10-31

CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code : 24J29-PTH04

Customer Identification : German Chamomile - Egypt - C80108R

Type : Essential Oil

Source : *Matricaria chamomilla*

Customer : Plant Therapy

Checked and approved by:

Alexis St-Gelais, Ph. D., Chimiste 2013-174

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GAS CHROMATOGRAPHIC ANALYSIS

Method : PC-MAT-014 - Analysis of the composition of an essential oil or other volatile liquide by FAST GC-FID

✖ISO

Results : See analysis summary (next page)

Analyst : Alexis St-Gelais, Ph. D., Chimiste 2013-174

Date : 2024-10-30

PHYSICOCHEMICAL DATA

Refractive index : 1.5053 ± 0.0003 (20 °C)

Method : PC-MAT-016 - Measure of the refractive index of a liquid.

Analyst : Cindy Caron B. Sc.

Date : 2024-10-31

CONCLUSION

No adulterant, contaminant or diluent has been detected using this method.

ANALYSIS SUMMARY - CONSOLIDATED CONTENTS

New readers of similar reports are encouraged to read table footnotes at least once.

Identification	%	Class
Isobutyral	0.01	Aliphatic aldehyde
3-Buten-2-one	0.01	Aliphatic ketone
Isovaleral	0.03	Aliphatic aldehyde
2-Methylbutyral	0.04	Aliphatic aldehyde
2-Ethylfuran	0.01	Furan
2-Vinylfuran	0.01	Furan
Toluene	0.01	Simple phenolic
Methyl 2-methylbutyrate	tr	Aliphatic ester
Octene	tr	Alkene
Hexanal	0.01	Aliphatic aldehyde
Octane	0.01	Alkane
Ethyl 2-methylbutyrate	0.19	Aliphatic ester
Ethyl isovalerate	0.03	Aliphatic ester
Nonene	tr	Alkene
Heptanal	0.01	Aliphatic aldehyde
Santolinatriene	0.01	Monoterpene
α -Pinene	0.02	Monoterpene
Unknown	0.01	Monoterpene
Camphene	0.02	Monoterpene
Propyl 2-methylbutyrate	0.07	Aliphatic ester
Benzaldehyde	0.01	Simple phenolic
β -Pinene	tr	Monoterpene
Sabinene	0.03	Monoterpene
6-Methyl-5-hepten-2-one	0.05	Aliphatic ketone
Myrcene	0.02	Monoterpene
2-Pentylfuran	0.05	Furan
Unknown	0.01	Monoterpene
α -Phellandrene	0.02	Monoterpene
Octanal	0.08	Aliphatic aldehyde
Yomogi alcohol	0.04	Monoterpenic alcohol
Δ^3 -Carene	0.01	Monoterpene
α -Terpinene	0.02	Monoterpene
<i>para</i> -Cymene	0.09	Monoterpene
Limonene	0.06	Monoterpene
1,8-Cineole	0.03	Monoterpenic ether
(<i>Z</i>)- β -Ocimene	0.10	Monoterpene
Seudenone?	0.02	Aliphatic ketone
(<i>E</i>)- β -Ocimene	0.47	Monoterpene
γ -Terpinene	0.14	Monoterpene
Artemisia ketone	0.36	Monoterpenic ketone

Octanol	0.02	Aliphatic alcohol
Artemisia alcohol	0.10	Monoterpenic alcohol
Linalool	0.02	Monoterpenic alcohol
Nonanal	0.09	Aliphatic aldehyde
Unknown	0.01	Oxygenated monoterpene
Camphor	0.01	Monoterpenic ketone
<i>trans</i> -Chrysanthemol	0.01	Monoterpenic alcohol
Borneol	0.05	Monoterpenic alcohol
<i>cis</i> -Chrysanthemol	0.02	Monoterpenic alcohol
Artemisyl acetate	0.02	Monoterpenic ester
Terpinen-4-ol	0.02	Monoterpenic alcohol
Nonanol	0.03	Aliphatic alcohol
α -Terpineol	0.01	Monoterpenic alcohol
Safranal	0.05	Monoterpenic aldehyde
Decanal	0.01	Aliphatic aldehyde
(3 <i>Z</i>)-Hexenyl isovalerate	0.01	Aliphatic ester
Carvone	0.04	Monoterpenic ketone
(2 <i>E</i>)-Hexenyl isovalerate	0.02	Aliphatic ester
Hexyl isovalerate	0.02	Aliphatic ester
α -Ionene	0.02	Terpene derivative
4,8-Dimethylnona-3,8-dien-2-one	0.04	Terpenic ketone
Pelargonic acid	0.03	Aliphatic acid
Thymol	0.04	Monoterpenic alcohol
Tridecane	0.01	Alkane
7 α H-Silphiperfol-5-ene	0.01	Sesquiterpene
Bicycloelemene	0.02	Sesquiterpene
δ -Elemene	0.01	Sesquiterpene
7 β H-Silphiperfol-5-ene	0.01	Sesquiterpene
α -Longipinene	0.01	Sesquiterpene
Dehydro-ar-ionene	0.02	Miscellaneous
α -Cubebene	0.03	Sesquiterpene
Eugenol	0.01	Phenylpropanoid
α -Copaene	0.05	Sesquiterpene
α -Isocomene	0.05	Sesquiterpene
β -Elemene	0.06	Sesquiterpene
Capric acid	0.97	Aliphatic acid
(<i>Z</i>)-Jasmone	0.03	Jasmonate
β -Isocomene	0.03	Sesquiterpene
Isocaryophyllene	0.03	Sesquiterpene
β -Caryophyllene	0.10	Sesquiterpene
β -Copaene	0.03	Sesquiterpene
α -Maaliene	0.03	Sesquiterpene
Aromadendrene	0.07	Sesquiterpene
α -Humulene	0.05	Sesquiterpene
allo-Aromadendrene	0.11	Sesquiterpene

(E)- β -Farnesene	17.81	Sesquiterpene
Precocene I	0.03	Chromane
Dehydrosesquicineole	0.14	Sesquiterpenic ether
γ -Muurolene	0.07	Sesquiterpene
Germacrene D	1.47	Sesquiterpene
β -Selinene	0.14	Sesquiterpene
ar-Curcumene	0.05	Sesquiterpene
Bicyclogermacrene	0.89	Sesquiterpene
α -Selinene	0.04	Sesquiterpene
Viridiflorene	0.09	Sesquiterpene
α -Zingiberene	0.06	Sesquiterpene
α -Muurolene	0.13	Sesquiterpene
(3Z,6E)- α -Farnesene	0.05	Sesquiterpene
(3E,6E)- α -Farnesene	0.75	Sesquiterpene
γ -Cadinene	0.14	Sesquiterpene
3,6-Dihydrochamazulene	1.02	Azulene
Dihydrochamazulene isomer I	0.20	Azulene
<i>trans</i> -Calamenene	0.02	Sesquiterpene
δ -Cadinene	0.22	Sesquiterpene
β -Sesquiphellandrene	0.03	Sesquiterpene
(2Z?,8Z?)-Matricaria ester	0.02	Polyyne ester
α -Cadinene	0.02	Sesquiterpene
(E)- α -Bisabolene	0.02	Sesquiterpene
Salviadienol?	0.02	Sesquiterpenic alcohol
Sesquirosefuran?	0.02	Sesquiterpenic ether
Unknown MARE XVI [m/z 43, 93 (84), 120 (51), 81 (41), 79 (34)...]	0.14	Oxygenated sesquiterpene
(E)-Nerolidol	0.08	Sesquiterpenic alcohol
Spathulenol	0.60	Sesquiterpenic alcohol
(2Z?,8E?)-Matricaria ester	0.03	Polyyne ester
Dendrolasin	0.19	Sesquiterpenic ether
Globulol	0.04	Sesquiterpenic alcohol
Caryophyllene oxide isomer	0.03	Sesquiterpenic ether
Caryophyllene oxide	0.01	Sesquiterpenic ether
Viridiflorol	0.10	Sesquiterpenic alcohol
Ledol	0.13	Sesquiterpenic alcohol
Torilenol	0.04	Oxygenated sesquiterpene
5,6-Dihydrochamazulene	0.33	Azulene
(2,7Z)-Bisaboladien-4-ol	0.21	Sesquiterpenic alcohol
Unknown	0.11	Unknown
τ -Muurolol	0.04	Sesquiterpenic alcohol
τ -Cadinol	0.58	Sesquiterpenic alcohol
Unknown	0.09	Unknown
α -Bisabolol oxide B, epimer 1	5.26	Sesquiterpenic alcohol
Ageratochromene	0.29	Chromane

epi-β-Bisabolol	0.05	Sesquiterpenic alcohol
β-Bisabolol	0.07	Sesquiterpenic alcohol
Bisabolone oxide A	4.44	Sesquiterpenic ketone
α-Bisabolol	1.14	Sesquiterpenic alcohol
Herniarin	0.04	Coumarin
Chamazulene	2.66	Azulene
α-Bisabolol oxide A	41.00	Sesquiterpenic alcohol
Benzyl benzoate	0.04	Phenolic ester
Bisabolol oxide, epimer II	0.13	Sesquiterpenic alcohol
Bisabolol oxide, epimer III	0.03	Sesquiterpenic alcohol
Myristic acid	0.31	Aliphatic acid
Phytone	0.26	Terpenic ketone
(Z)-Spiroether	4.98	Polyyne
(E)-Spiroether	0.64	Polyyne
(Z)-Tibetin spiroether	0.04	Polyyne
Methyl palmitate	0.03	Aliphatic ester
(E)-Tibetin spiroether	0.16	Polyyne
Palmitic acid	1.18	Aliphatic acid
Ethyl palmitate	0.01	Aliphatic ester
Eicosane	0.04	Alkane
Octadecanol	0.06	Aliphatic alcohol
Methyl linoleate	0.03	Aliphatic ester
Heneicosane	0.03	Alkane
Phytol	0.11	Diterpenic alcohol
Linoleic acid	0.34	Aliphatic acid
Oleic acid	0.30	Aliphatic acid
Stearic acid	0.01	Aliphatic acid
Docosane	0.04	Alkane
Tricosane	0.35	Alkane
Tetracosane	0.09	Alkane
Pentacosane	0.90	Alkane
Hexacosane	0.04	Alkane
Heptacosane	0.19	Alkane
Unknown	0.01	Unknown
Unknown	0.03	Oxygenated triterpene
Unknown	0.06	Unknown
Unknown	0.02	Oxygenated triterpene
Unknown MARE XIX [m/z 69, 71 (51), 41 (48), 97 (46), 91 (36)...]	0.01	Unknown
Consolidated total	96.19	

tr: The compound has been detected below 0.005% of the total signal

Note: no correction factor was applied

About "consolidated" data: The table above presents the breakdown of the sample volatile constituents after applying an algorithm to collapse data acquired from the multi-columns system of PhytoChemia into a single set of consolidated contents. In case of discrepancies between columns, the algorithm is set to prioritize data from the most standard DB-5 column, and smallest values so as to avoid overestimating individual content. This process is semi-automatic. Advanced users are invited to consult the "Full analysis data" table after the

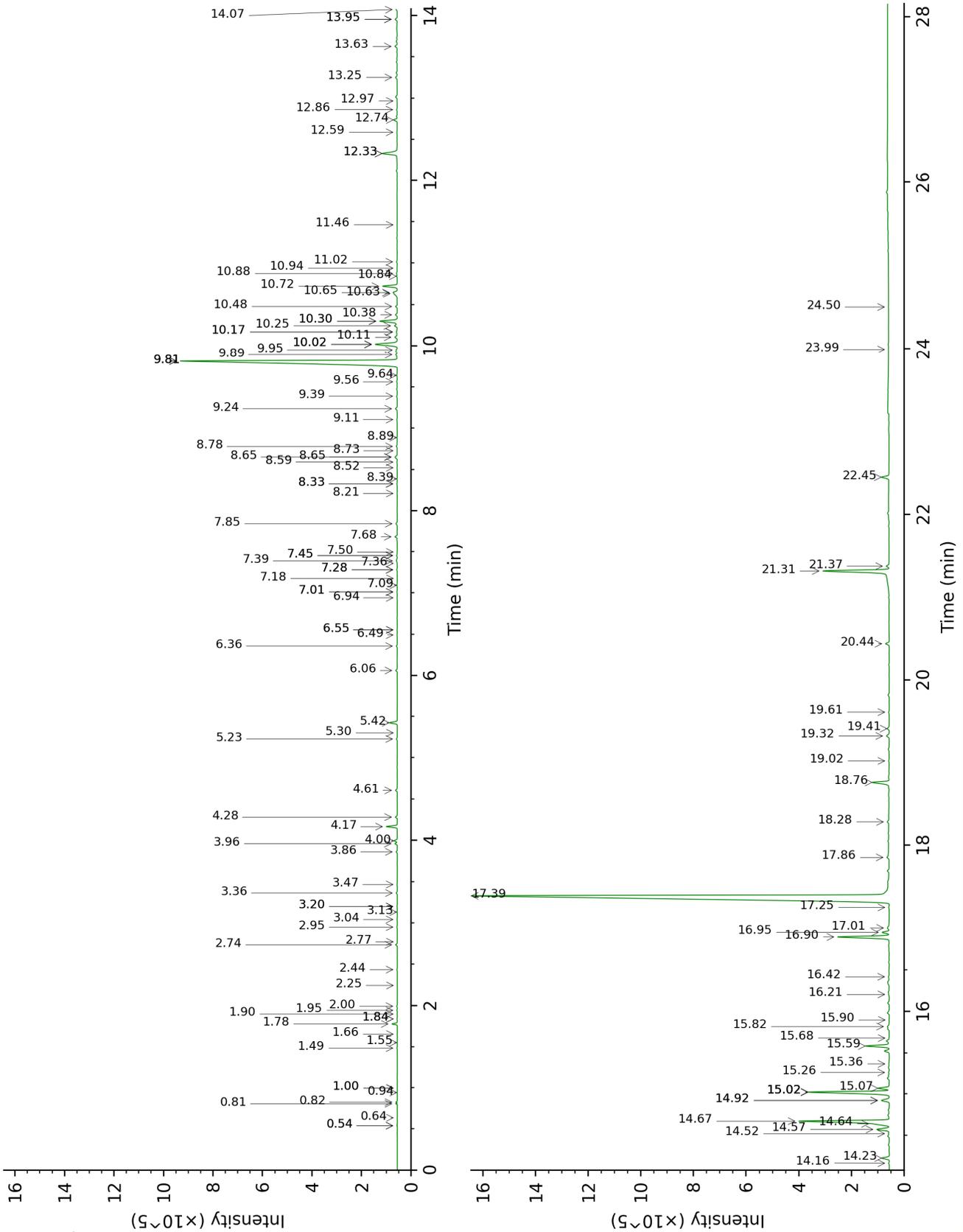
chromatograms in this report to access the full untreated data and perform their own calculations if needed.

Unknowns: Unknown compounds' mass spectral data is presented in the "Full analysis data" table. The occurrence of unknown compounds is to be expected in many samples, and does not denote particular problems unless noted otherwise in the conclusion.

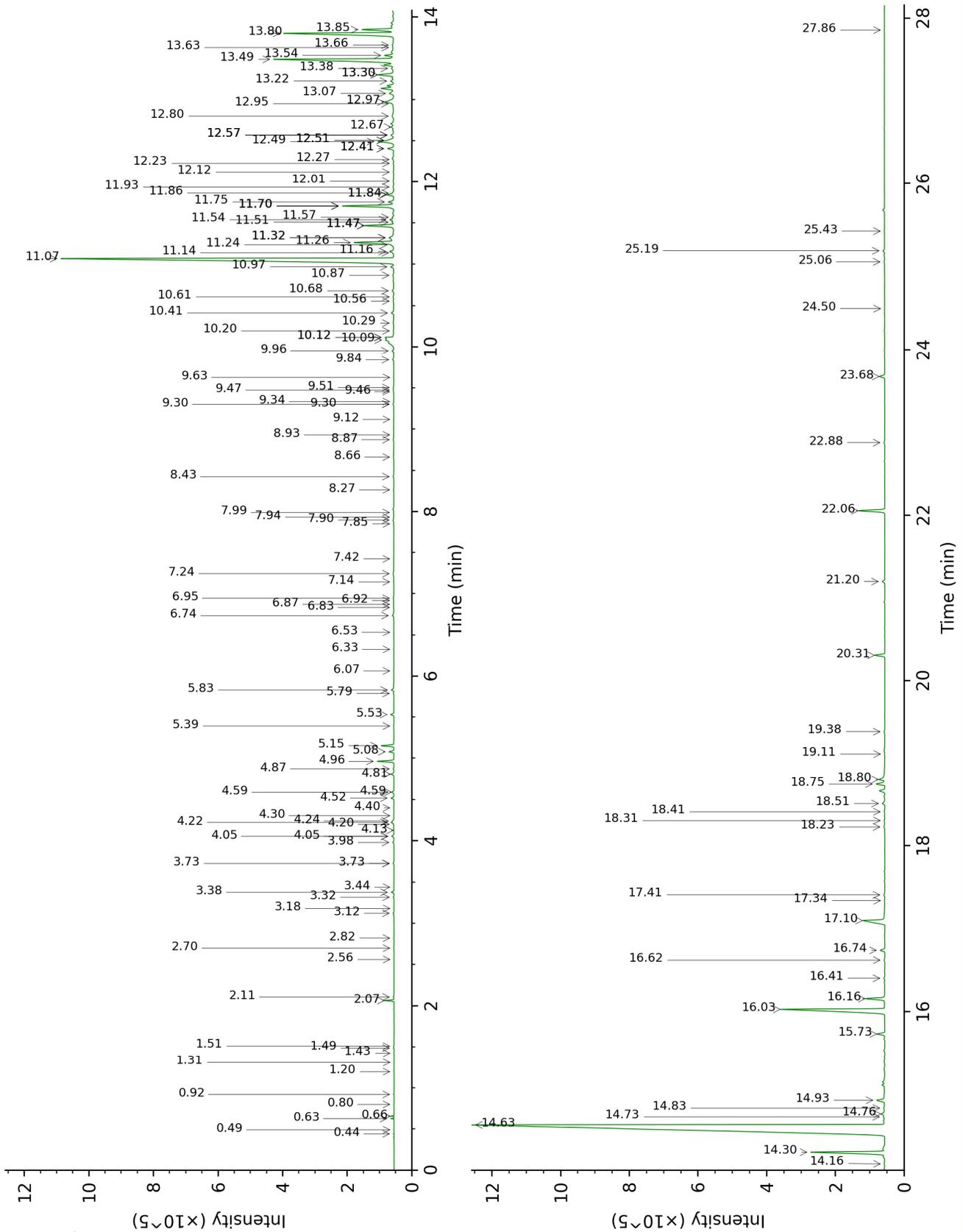
Bracketed value (xx): A bracketed percent value indicate that two or more compound percentage could not be solved due to coelution.

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DB-WAX



DB-5



FULL ANALYSIS DATA

Isobutyral	Column DB-WAX			Column DB-5		
	0.54*	782.7	[0.01]	0.44	536.1	0.01
3-Buten-2-one	0.94	912.1	0.01	0.49	577.2	0.01
Isovaleral	0.82	887.3	0.04	0.63	640.6	0.03
2-Methylbutyral	0.81	881.1	0.04	0.66	651.0	0.04
2-Ethylfuran	1.00*	920.1	[0.01]	0.80	700.4	0.01
2-Vinylfuran	1.90	1034.2	0.01	0.92	719.9	0.01
Toluene	1.56	1001.7	tr	1.20	758.8	0.01
Methyl 2-methylbutyrate				1.31	774.7	tr
Octene	0.64	826.3	tr	1.43	791.1	tr
Hexanal	2.00	1043.2	0.03	1.49	800.0	0.01
Octane	0.54*	782.7	[0.01]	1.51	803.2	0.01
Ethyl 2-methylbutyrate	1.78	1022.9	0.21	2.07	849.6	0.19
Ethyl isovalerate	1.94	1038.5	0.02	2.11	853.2	0.03
Nonene	1.00*	920.1	[0.01]	2.56	890.9	tr
Heptanal	3.20*	1147.0	[0.02]	2.70	902.3	0.01
Santolinatriene	1.66	1011.3	0.01	2.82	910.8	0.01
α -Pinene	1.49	993.6	0.02	3.12	930.7	0.02
Unknown BODA VII [m/z 93, 91 (50), 92 (37), 79 (36), 77 (35), 121 (19)... 136 (t)]	1.84*	1028.6	[0.02]	3.18	934.6	0.01
Camphene	1.84*	1028.6	[0.02]	3.32	943.5	0.02
Propyl 2-methylbutyrate	2.74	1111.0	0.08	3.38	947.5	0.07
Benzaldehyde	7.50	1458.9	0.01	3.44	951.6	0.01
β -Pinene	2.25	1067.1	tr	3.73*	970.6	[0.03]
Sabinene	2.44	1085.4	0.03	3.73*	970.6	[0.03]
6-Methyl-5-hepten-2-one	5.23	1300.4	0.05	3.98	987.4	0.05
Myrcene	3.04	1134.7	0.02	4.06*	992.3	[0.08]
2-Pentylfuran	3.86	1198.7	0.05	4.06*	992.3	[0.08]
Unknown ACMI II [m/z 93, 91 (46), 80 (44), 79 (42), 77 (33), 92 (20)... 136 (4)]	3.20*	1147.0	[0.02]	4.13	997.1	0.01
α -Phellandrene	2.95	1127.6	0.03	4.20	1002.0	0.02
Octanal	4.60	1253.9	0.09	4.22	1003.5	0.08
Yomogi alcohol	6.36	1375.3	0.05	4.24	1004.6	0.04
Δ 3-Carene	2.77	1113.9	0.01	4.30	1008.6	0.01
α -Terpinene	3.13	1141.7	0.02	4.40	1014.6	0.02
<i>para</i> -Cymene	4.28	1229.9	0.09	4.52	1022.0	0.09

Limonene	3.36	1159.7	0.06	4.59*	1026.5	[0.07]
1,8-Cineole	3.47	1167.7	0.03	4.59*	1026.5	[0.07]
(Z)- β -Ocimene	3.96	1206.1	0.11	4.81	1040.1	0.10
Seudenone?	8.52	1536.7	0.02	4.87	1044.1	0.02
(E)- β -Ocimene	4.17	1221.4	0.51	4.96	1049.9	0.47
γ -Terpinene	4.00	1208.7	0.16	5.08	1057.1	0.14
Artemisia ketone	5.42	1308.2	0.38	5.15	1061.7	0.36
Octanol	8.39	1526.3	0.02	5.39	1076.7	0.02
Artemisia alcohol	7.68	1472.5	0.12	5.53	1085.4	0.10
Linalool	8.21	1512.6	0.02	5.79	1102.0	0.02
Nonanal	6.06	1354.2	0.09	5.84	1104.6	0.09
Unknown ARAN IV [m/z 43, 81 (62), 59 (60), 85 (49), 82 (38)... 154 (2)]				6.07	1119.4	0.01
Camphor	7.36	1448.7	0.01	6.33	1136.1	0.01
<i>trans</i> -Chrysanthemol	9.81*	1638.4	[18.77]	6.53	1149.2	0.01
Borneol	9.95	1649.6	0.05	6.74	1162.2	0.05
<i>cis</i> -Chrysanthemol	10.02*	1655.3	[1.52]	6.83	1168.5	0.02
Artemisyl acetate	6.55*	1389.4	[0.02]	6.87	1170.9	0.02
Terpinen-4-ol	8.73	1552.6	0.02	6.92	1173.8	0.02
Nonanol	9.64	1624.4	0.04	6.95	1175.6	0.03
α -Terpineol	10.02*	1655.3	[1.52]	7.14	1188.3	0.01
Safranal	9.11	1581.7	0.03	7.24	1194.6	0.05
Decanal	7.45*	1455.7	[0.04]	7.42	1206.1	0.01
(3Z)-Hexenyl isovalerate	7.28*	1442.9	[0.03]	7.85	1235.0	0.01
Carvone	10.17*	1667.4	[0.09]	7.90	1238.1	0.04
(2E)-Hexenyl isovalerate	7.45*	1455.7	[0.04]	7.94	1240.6	0.02
Hexyl isovalerate	6.94	1417.8	0.02	7.99	1244.3	0.02
α -Ionene	7.09	1429.0	0.01	8.27	1262.7	0.02
4,8-Dimethylnona- 3,8-dien-2-one	9.39	1603.9	0.04	8.43	1273.4	0.04
Pelargonic acid				8.66	1289.2	0.03
Thymol	15.36	2136.4	0.03	8.87	1303.3	0.04
Tridecane	5.30	1299.5	0.01	8.93	1307.4	0.01
7 α H-Silphiperfol-5- ene	6.49	1384.9	0.02	9.12	1320.6	0.01
Bicycloelemene	7.28*	1442.9	[0.03]	9.30*	1333.6	[0.03]
δ -Elemene	7.18	1435.1	0.01	9.30*	1333.6	[0.03]
7 β H-Silphiperfol-5- ene	6.55*	1389.4	[0.02]	9.34	1335.9	0.01
α -Longipinene	7.01*	1423.0	[0.03]	9.46	1344.3	0.01
Dehydro-ar-ionene				9.47	1345.6	0.02

α -Cubebene	7.01*	1423.0	[0.03]	9.51	1347.9	0.03
Eugenol	15.02*	2102.5	[4.66]	9.63	1356.4	0.01
α -Copaene	7.39	1450.9	0.07	9.84	1371.7	0.05
α -Isocomene	7.85	1484.8	0.08	9.96	1379.7	0.05
β -Elemene	8.65*	1546.7	[0.16]	10.09*†	1389.0	[0.42]
Capric acid				10.12*†	1391.2	[0.34]
(Z)-Jasmone	12.59	1874.0	0.03	10.12*†	1391.2	[0.34]
β -Isocomene	8.33*	1521.6	[0.03]	10.20	1396.8	0.03
Isocaryophyllene	8.33*	1521.6	[0.03]	10.29	1403.4	0.03
β -Caryophyllene	8.65*	1546.7	[0.16]	10.41	1412.4	0.10
β -Copaene	8.59	1542.0	0.03	10.56	1423.1	0.03
α -Maaliene	8.89	1564.9	0.01	10.61	1426.9	0.03
Aromadendrene	8.78	1556.7	0.06	10.68	1432.4	0.07
α -Humulene	9.56	1618.0	0.04	10.87	1446.2	0.05
allo-Aromadendrene	9.24	1591.9	0.11	10.97	1453.8	0.11
(E)- β -Farnesene	9.81*	1638.4	[18.77]	11.07	1461.3	17.81
Precocene I	14.08	2010.9	0.07	11.14	1466.4	0.03
Dehydrosesquicineole	10.25	1673.4	0.15	11.16	1467.6	0.14
γ -Muurolene	9.81*	1638.4	[18.77]	11.24	1473.6	0.07
Germacrene D	10.02*	1655.3	[1.52]	11.26	1475.6	1.47
β -Selinene	10.11	1662.2	0.14	11.32*	1480.0	[0.25]
ar-Curcumene	10.88	1725.7	0.05	11.32*	1480.0	[0.25]
Bicyclogermacrene	10.30*	1677.9	[1.02]	11.47*	1490.9	[0.99]
α -Selinene	10.17*	1667.4	[0.09]	11.47*	1490.9	[0.99]
Viridiflorene	9.89	1644.7	0.09	11.47*	1490.9	[0.99]
α -Zingiberene	10.38	1684.1	0.10	11.51	1493.9	0.06
α -Muurolene	10.30*	1677.9	[1.02]	11.54	1496.2	0.13
(3Z,6E)- α -Farnesene	10.48	1692.2	0.08	11.57	1498.3	0.05
(3E,6E)- α -Farnesene	10.72	1712.7	0.75	11.70*	1508.7	[1.75]
γ -Cadinene	10.64	1705.2	0.14	11.70*	1508.7	[1.75]
3,6-Dihydrochamazulene	12.33*	1851.3	[1.04]	11.70*	1508.7	[1.75]
Dihydrochamazulene isomer I				11.75	1512.6	0.20
trans-Calamenene	11.46	1775.3	0.02	11.84*	1519.4	[0.24]
δ -Cadinene	10.65	1706.3	0.22	11.84*	1519.4	[0.24]
β -Sesquiphellandrene	10.84	1722.9	0.03	11.86	1520.9	0.03
(2Z?,8Z?)-Matricaria ester	16.42	2244.1	0.07	11.93	1526.8	0.02
α -Cadinene	11.02	1737.6	0.04	12.01	1532.4	0.02
(E)- α -Bisabolene	10.94	1731.1	0.02	12.12	1541.5	0.02
Salviadienol?	14.52	2054.0	0.05	12.23	1549.9	0.02
Sesquirosefuran?	12.33*	1851.3	[1.04]	12.27	1553.5	0.02
Unknown MARE XVI [m/z 43, 93 (84), 120]				12.41*	1563.9	[0.22]

(51), 81 (41), 79 (34)...]						
(E)-Nerolidol	13.95*	1999.3	[0.11]	12.41*	1563.9	[0.22]
Spathulenol	14.57	2058.8	0.73	12.49	1570.5	0.60
(2Z?,8E?)-Matricaria ester	17.26	2332.4	0.03	12.51*	1571.7	[0.16]
Dendrolasin	12.74	1887.2	0.19	12.51*	1571.7	[0.16]
Globulol	14.16	2019.6	0.04	12.57*	1576.7	[0.12]
Caryophyllene oxide isomer	12.86	1898.3	0.03	12.57*	1576.7	[0.12]
Caryophyllene oxide	12.97	1908.0	0.01	12.57*	1576.7	[0.12]
Viridiflorol	14.23	2025.5	0.40	12.67	1584.3	0.10
Ledol	13.63	1968.9	0.13	12.80	1594.7	0.13
Torilenol	15.68	2168.3	0.02	12.95	1606.6	0.04
5,6-Dihydrochamazulene	14.64	2065.4	0.59	12.97	1608.3	0.33
(2,7Z)-Bisaboladien-4-ol	15.02*	2102.5	[4.66]	13.07	1616.9	0.21
Unknown UNKN CXCI [m/z 93, 41 (52), 79 (46), 91 (45), 43 (38), 67 (37)...]				13.22	1629.3	0.11
τ-Muurolol	15.26	2126.1	0.04	13.30*	1635.6	[0.62]
τ-Cadinol	15.07	2107.1	0.58	13.30*	1635.6	[0.62]
Unknown LYUN IV [m/z 123, 43 (86), 81 (75), 95 (73), 82 (68), 161 (64), 105 (63)... 220 (6)]	13.25	1934.3	0.10	13.38	1642.0	0.09
α-Bisabolol oxide B, epimer 1	14.67	2068.4	5.16	13.49	1651.1	5.26
Ageratochromene	17.01	2305.7	0.15	13.54	1655.0	0.29
epi-β-Bisabolol	15.02*	2102.5	[4.66]	13.63	1662.8	0.05
β-Bisabolol	15.02*	2102.5	[4.66]	13.66	1665.3	0.07
Bisabolone oxide A	15.02*	2102.5	[4.66]	13.80	1677.1	4.44
α-Bisabolol	15.59	2158.8	1.22	13.85	1680.8	1.14
Herniarin	21.37	2813.1	0.15	14.16	1706.5	0.04
Chamazulene	16.90	2294.0	2.78	14.30	1718.9	2.66
α-Bisabolol oxide A	17.39	2347.3	42.54	14.63	1747.4	41.00
Benzyl benzoate	19.02	2528.6	0.03	14.73	1755.9	0.04
Bisabolol oxide, epimer II				14.76	1758.9	0.13
Bisabolol oxide, epimer III				14.83	1765.1	0.03
Myristic acid				14.93	1773.3	0.31
Phytone	14.92*	2092.4	[0.49]	15.73	1845.2	0.26

(Z)-Spiroether	21.31	2805.7	4.70	16.03	1872.2	4.98
(E)-Spiroether	22.45	2952.6	0.41	16.16	1884.0	0.64
(Z)-Tibetin spiroether				16.40	1906.3	0.04
Methyl palmitate	15.82	2182.2	0.11	16.62	1927.2	0.03
(E)-Tibetin spiroether				16.74	1938.4	0.16
Palmitic acid				17.10	1972.5	1.18
Ethyl palmitate	16.21	2222.0	0.03	17.34	1995.3	0.01
Eicosane	13.95*	1999.3	[0.11]	17.41	2001.8	0.04
Octadecanol	19.32	2563.4	0.18	18.23	2083.2	0.06
Methyl linoleate	18.28	2445.3	0.09	18.31	2090.9	0.03
Heneicosane	14.92*	2092.4	[0.49]	18.41	2101.4	0.03
Phytol	19.41	2573.6	0.12	18.51	2111.6	0.11
Linoleic acid				18.75	2135.9	0.34
Oleic acid				18.80	2141.6	0.30
Stearic acid				19.11	2173.3	0.01
Docosane	15.90	2190.2	0.02	19.38	2201.2	0.04
Tricosane	16.96	2300.0	0.37	20.31	2301.4	0.35
Tetracosane	17.86	2397.5	0.10	21.20	2401.0	0.09
Pentacosane	18.76	2498.7	0.99	22.06	2501.3	0.90
Hexacosane	19.60	2596.9	0.04	22.88	2600.4	0.04
Heptacosane	20.44	2696.6	0.19	23.68	2700.1	0.19
Unknown MARE V [m/z 69, 41 (41), 81 (41), 91 (22), 165 (22), 136 (20)...]				24.50	2806.9	0.01
Unknown MARE I [m/z 69, 81 (32), 41 (31), 95 (16), 91 (14), 93 (13), 107 (12)... 408? (3)]	23.99	3163.3	0.01	25.06	2882.0	0.03
Unknown MARE IX [m/z 69, 41 (43), 81 (36), 91 (21), 165 (20), 55 (15)...]				25.19	2899.8	0.06
Unknown MARE II [m/z 69, 81 (36), 41 (31), 93 (24), 95 (19), 91 (14), 67 (13), 121 (12)... 408? (2)]	24.50	3235.9	0.01	25.43	2932.3	0.02
Unknown MARE XIX [m/z 69, 71 (51), 41 (48), 97 (46), 91 (36)...]				27.86	3219.7	0.01
Total reported		95.54%			96.00%	

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, only the first one is taken into account in the consolidated total

Essential Oil, *Matricaria chamomilla*

Internal code: 24J29-PTH04

German Chamomile - Egypt - C80108R

Report prepared for:

Plant Therapy

†: Peaks apexes were resolved, but peaks overlapped and were summed for analysis

tr: The compound has been detected below 0.005% of total signal.

Note: no correction factor was applied

R.T.: Retention time (minutes)

R.I.: Retention index