

Date: 2025-10-03

## CERTIFICATE OF ANALYSIS - GC PROFILING

SAMPLE IDENTIFICATION

Internal code: 25H20-PTH21

Customer Identification: White Camphor - China - C30109

Type: Essential Oil

**Source :** Cinnamomum camphora ct. White camphor

**Customer:** Plant Therapy

Checked an approved by:

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

Notes: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia. This report is digitally signed, it is only considered valid if the digital signature is intact. The results only describe the samples that were submitted to the assays.

This report is an update from the first version issued on 2025-08-27 to correct the customer identification.





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: Sylvain Mercier, M. Sc., Chimiste 2014-005

**Date:** 2025-08-22

PHYSICOCHEMICAL DATA

**Refractive index :**  $1.4692 \pm 0.0003 (20 \, ^{\circ}\text{C})$ 

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

Analyst: Kassandra Baker

Date: 2025-08-21

**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
3-Methylcyclopentyl acetate	tr	Aliphatic ester
Bornylene	0.01	Monoterpene
Unknown	0.01	Unknown
Hashishene	0.04	Monoterpene
Tricyclene	0.02	Monoterpene
α-Thujene	0.47	Monoterpene
α-Pinene	8.17	Monoterpene
α-Fenchene	0.06	Monoterpene
Camphene	0.54	Monoterpene
Sabinene	5.72	Monoterpene
β-Pinene	2.81	Monoterpene
Heptanol	0.04	Aliphatic alcohol
6-Methyl-5-hepten-2-one	0.04	Aliphatic ketone
Myrcene	3.66	Monoterpene
6-Methyl-5-hepten-2-ol	0.04	Aliphatic alcohol
2-Carene	0.03	Monoterpene
Pseudolimonene	0.01	Monoterpene
Octanal	0.03	Aliphatic aldehyde
α-Phellandrene	1.37	Monoterpene
Δ3-Carene	0.03	Monoterpene
α-Terpinene	2.23	Monoterpene
para-Cymene	7.81	Monoterpene
Carvomenthene	0.02	Aliphatic alcohol
1,8-Cineole	35.74	Monoterpenic ether
Limonene	27.00	Monoterpene
( <i>Z</i> )-β-Ocimene	0.06	Monoterpene
Unknown	0.01	Monoterpene
( <i>E</i> )-β-Ocimene	0.33	Monoterpene
γ-Terpinene	3.25	Monoterpene
cis-Sabinene hydrate	0.02	Monoterpenic alcohol
cis-Linalool oxide (fur.)	0.02	Monoterpenic alcohol
Fenchone	0.03	Monoterpenic ketone
Terpinolene	0.03	Monoterpene
Unknown	0.01	Monoterpenic alcohol
trans-para-Mentha-2,8-dien-1-ol	0.02	Monoterpenic alcohol
cis-para-Mentha-2,8-dien-1-ol	0.01	Monoterpenic alcohol
Unknown	0.01	Oxygenated monoterpene
Unknown	0.03	Unknown
Unknown	0.02	Unknown
Cryptone	0.02	Normonoterpenic ketone



Unknown	0.01	Unknown
Carvone	0.01	Monoterpenic ketone
Unknown	0.02	Unknown
trans-Ascaridole glycol	0.02	Monoterpenic alcohol
cis-Ascaridole glycol	0.01	Monoterpenic alcohol
Unknown	0.02	Unknown
<i>meta</i> -Camphorene	0.03	Diterpene
para-Camphorene	0.02	Diterpene
Consolidated total	99.92	

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.



This page was intentionally left blank. The following pages present the complete data of the analysis.



Laboratoire PhytoChemia

628 Boulevard du Saguenay, Saguenay (Qc) G7J 1H4 | www.phytochemia.com

Plus que des analyses... des conseils

Page 7/10

628 Boulevard du Saguenay, Saguenay (Qc) G7J 1H4 | www.phytochemia.com

## **FULL ANALYSIS DATA**

3-	(	Column DB-WA	X		Column DB-5	
Methylcyclopentyl	2.60*	1126.0	[1.38]	2.64*	903.3	[0.02]
acetate	2.00	1120.0	[1.36]	2.04	903.3	[0.02]
Bornylene	0.98	941.9	0.01	2.64*	903.3	[0.02]
Unknown FRAG XC						
[m/z 69, 93 (91), 41	1.56*	1026.1	[0.55]	2.77	912.3	0.01
(88), 79 (22), 40	1.50	1020.1	[0.55]	2.77	912.3	0.01
(20), 91 (17)]						
Hashishene	1.26*	991.1	[8.17]	2.82	915.4	0.04
Tricyclene	1.14	969.2	0.02	2.86	918.1	0.02
α-Thujene	1.31	999.4	0.47	2.97	925.6	0.47
α-Pinene	1.26*	991.1	[8.17]	3.06	931.3	8.17
α-Fenchene	1.50	1019.8	0.06	3.23*	943.2	[0.61]
Camphene	1.56*	1026.1	[0.55]	3.23*	943.2	[0.61]
Sabinene	2.13	1084.9	5.72	3.65*	971.4	[8.58]
β-Pinene	1.94	1065.6	2.81	3.65*	971.4	[8.58]
Heptanol	6.62*	1426.7	[0.04]	3.69	974.0	0.04
6-Methyl-5-hepten-	4.85	1296.9	0.03	3.89	987.1	0.04
2-one						
Myrcene	2.70	1134.6	3.64	3.98	993.3	3.66
6-Methyl-5-hepten- 2-ol	6.68	1431.1	0.03	4.02	996.3	0.04
2-Carene	2.22	1094.7	0.04	4.05	998.4	0.03
Pseudolimonene	2.64	1129.2	0.01	4.11*	1002.2	[1.42]
Octanal	4.22	1250.8	0.03	4.11*	1002.2	[1.42]
α-Phellandrene	2.60*	1126.0	[1.38]	4.11*	1002.2	[1.42]
Δ3-Carene	2.41	1110.5	0.03	4.20	1007.7	0.03
α-Terpinene	2.77	1140.1	2.21	4.31	1015.1	2.23
<i>para-</i> Cymene	3.90	1227.8	7.81	4.46*†	1024.8	[8.31]
Carvomenthene	2.27	1099.9	0.02	4.46*†	1024.8	[8.31]
1,8-Cineole	3.16	1171.1	35.74	4.57*†	1031.5	[62.07]
Limonene	3.04	1161.1	27.00	4.57*†	1031.5	[62.07]
( <i>Z</i> )-β-Ocimene	3.60*	1205.8	[3.29]	4.71	1040.6	0.06
Unknown CICA II						
[m/z 93, 136 (45),				4.82	1047.3	0.01
79 (41), 91 (33), 77				1.02	1017.5	0.01
(25)]						
( <i>E</i> )-β-Ocimene	3.78	1218.7	0.32	4.87	1050.3	0.33
γ-Terpinene	3.60*	1205.8	[3.29]	4.99	1058.2	3.25
<i>cis</i> -Sabinene	6.62*	1426.7	[0.04]	5.09	1064.6	0.02
hydrate	0.02	1720.7	[0.04]	3.09	1004.0	0.02
cis-Linalool oxide (fur.)	6.31	1403.9	0.02	5.19	1071.0	0.02
Fenchone	5.45	1341.4	0.03	5.37	1082.3	0.03





Internal code: 25H20-PTH	•	•	nphor - China - C30	)109	,	Plant Therapy
Terpinolene	4.05	1238.8	0.03	5.43	1086.2	0.03
Unknown ORMA I [m/z 119, 109 (94), 43 (61), 95 (56), 91 (48), 77 (32), 152 (32), 137 (31), 134 (24)]	8.20	1546.9	0.01	5.73	1105.0	0.01
<i>trans-para</i> -Mentha- 2,8-dien-1-ol	8.73	1587.9	0.02	5.93	1118.2	0.02
<i>cis-para</i> -Mentha- 2,8-dien-1-ol	9.21	1626.5	0.01	6.16	1132.6	0.01
Unknown CICA III [m/z 109, 41 (49), 124 (41), 43 (31), 95 (28), 84 (22) 152 (7)]	6.59	1424.6	0.01	6.36*	1145.8	[0.04]
Unknown MEAL II [m/z 109, 124 (45), 119 (41), 43 (35), 91 (28), 95 (25)]	6.55	1421.6	0.03	6.36*	1145.8	[0.04]
Unknown CICA VIII [m/z 71, 85 (48), 43 (42), 57 (38), 58 (37), 41 (21), 155 (12)]				6.44	1151.3	0.02
Cryptone	8.88	1599.8	0.02	6.88	1179.3	0.02
Unknown CICA IV [m/z 43, 97 (72), 41 (44), 71 (27), 55 (26), 82 (25)]				7.53	1222.4	0.01
Carvone	9.71	1667.2	0.01	7.78	1239.4	0.01
Unknown CALU IV [m/z 43, 97 (69), 107 (46), 41 (28), 55 (21), 109 (20)]	10.84	1762.2	0.01	7.93	1249.6	0.02
trans-Ascaridole	13.91	2041.7	0.01	8.24	1270.4	0.02
glycol <i>cis</i> -Ascaridole glycol				8.51	1288.5	0.01
Unknown EUGL I [m/z 43, 95 (62), 107 (45), 110 (41), 55 (28), 67 (25)]	13.74	2025.1	0.01	9.50	1355.4	0.02
<i>meta</i> -Camphorene	15.04	2153.1	0.03	16.72	1950.4	0.03
<i>para</i> -Camphorene	15.48	2198.1	0.01	17.08	1984.1	0.02



Total reported	99.68%			99.79%		

<sup>\*:</sup> Two or more compounds are coeluting on this column

Note: no correction factor was applied R.T.: Retention time (minutes) R.I.: Retention index



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

<sup>†:</sup> Peaks apexes were resolved, but peaks overlapped and were summed for analysis

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