



PLANT THERAPY

100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: CC0104

ESSENTIAL OIL: CINNAMON BARK

BOTANICAL NAME: CINNAMOMUM VERUM

ORIGIN: SRI LANKA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CINNAMON BARK OIL	%
(E)-CINNAMALDEHYDE	72.2
EUGENOL	6.1
LINALOOL	5.5
β -CARYOPHYLLENE	5.3
(E)-CINNAMYL ACETATE	4.7
BENZYL BENZOATE	1.3
1,8-CINEOLE	1.1

Comments from Robert Tisserand: Warm, powdery, spicy odor quality. Constituents are in expected amounts.

Date : November 7, 2017

SAMPLE IDENTIFICATION

Internal code : 17K06-PTH2-1-CC

Customer identification : Cinnamon Bark - Sri Lanka - CC010476R

Type : Essential Oil

Source : *Cinnamomum verum*

Customer : Plant Therapy

ANALYSIS

Method : PC-PA-001-15E06, "Analysis of the composition of a liquid essential oil by GC-FID" (in French).

Identifications double-checked by GC-MS

Analyst : Sylvain Mercier, M. Sc., chimiste

Analysis date : 2017-11-07

Checked and approved by :

Alexis St-Gelais, M. Sc., chimiste 2013-174

Note: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.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.

IDENTIFIED COMPOUNDS

Identification	Column: BP5			Column: WAX			Molecular Class
	R.T.	R.I.	%	%	R.I.	R.T.	
Toluene	1.32	759	tr	0.10	957	1.19*	Simple phenolic
Styrene	2.90	895	0.01	tr	1202	3.69	Phenylpropanoid
α -Thujene	3.31	920	0.05	[0.10]	957	1.19*	Monoterpene
α -Pinene	3.41	926	0.28	0.22	948	1.15	Monoterpene
Camphene	3.70	943	0.11	0.08	1000	1.44	Monoterpene
Sabinene	4.13	968	0.01	0.01	1054	1.97	Monoterpene
β -Pinene	4.19	972	0.09	0.07	1038	1.80	Monoterpene
Benzaldehyde	4.22	974	0.05	0.18	1430	7.41*	Simple phenolic
Myrcene	4.47	988	0.03	0.09	1122	2.64*	Monoterpene
α -Phellandrene	4.75*	1004	0.32	0.29	1109	2.46	Monoterpene
Δ^3 -Carene	4.75*	1004	[0.32]	0.02	1078	2.27	Monoterpene
α -Terpinene	4.93	1014	0.09	[0.09]	1122	2.64*	Monoterpene
para-Cymene	5.13	1025	0.34	0.35	1208	3.77*	Monoterpene
Limonene	5.16	1027	0.13	1.45	1144	2.93*	Monoterpene
β -Phellandrene	5.19	1029	0.29	[1.45]	1144	2.93*	Monoterpene
1,8-Cineole	5.22	1030	1.05	[1.45]	1144	2.93*	Monoterp. ether
cis- β -Ocimene	5.34	1037	0.01	0.03	1188	3.50*	Monoterpene
trans- β -Ocimene	5.52	1046	0.01	[0.35]	1208	3.77*	Monoterpene
γ -Terpinene	5.71	1057	0.02	[0.03]	1188	3.50*	Monoterpene
cis-Linalool oxide (fur.)	5.99	1072	0.01	0.01	1373	6.28	Monoterp. alcohol
Isoterpinolene	6.10	1078	0.01	0.03	1223	3.99*	Monoterpene
Terpinolene	6.19	1083	0.03	[0.03]	1223	3.99*	Monoterpene
trans-Linalool oxide (fur.)	6.31	1089	0.03	0.02	1403	6.76	Monoterp. alcohol
para-Cymenene	6.41	1095	0.01	0.01	1366	6.17	Monoterpene
Linalool	6.74	1108	5.49	5.48	1494	8.91*	Monoterp. alcohol
cis-para-Menth-2-en-1-ol	7.18	1124	0.05	[5.48]	1494	8.91*	Monoterp. alcohol
Hydrocinnamaldehyde	8.48	1171	0.04				Phenylpropanoid
Borneol	8.64	1177	0.02	0.08	1619	13.60*	Monoterp. alcohol
Terpinen-4-ol	8.79	1182	0.04	5.39	1521	9.79*	Monoterp. alcohol
α -Terpineol	9.46	1203	0.09	[0.08]	1619	13.60*	Monoterp. alcohol
α -Phellandrene epoxide	9.74	1209	0.01	0.02	1720	19.05*	Monoterpene
(Z)-Cinnamaldehyde	10.52	1226	0.24	0.23	1764	21.99	Phenylpropanoid
Hydrocinnamyl alcohol	11.41	1246	0.13	0.04	1959	34.66	Phenylpropanoid
Phenylethyl acetate	11.99	1259	0.03	[0.02]	1720	19.05*	Phenolic ester
(E)-Cinnamaldehyde	13.99	1301	72.17	72.45	1908	32.23	Phenylpropanoid
(E)-Cinnamyl alcohol	15.60	1325	0.04	0.03	2162	41.54	Phenylpropanoid
Eugenol	17.92*	1360	6.33	6.11	2054	38.41	Phenylpropanoid
α -Copaene	17.92*	1360	[6.33]	[0.18]	1430	7.41*	Sesquiterpene
β -Elemene	18.95	1376	0.06	[5.39]	1521	9.79*	Sesquiterpene
Isocaryophyllene	19.56	1385	0.02	0.02	1506	9.23	Sesquiterpene
β -Caryophyllene	20.71	1401	5.32	[5.39]	1521	9.79*	Sesquiterpene

α -Humulene	23.39	1433	0.20	0.18	1582	12.01	Sesquiterpene
(E)-Cinnamyl acetate	25.23	1455	4.66	4.72	2036	37.84	Phenylpropanoid ester
(Z)-Cinnamic acid	27.28	1480	0.15	1.34	2473	48.53*	Phenylpropanoid
δ -Cadinene	29.31	1505	0.04	0.04	1673	16.42	Sesquiterpene
Eugenyl acetate	31.16	1531	0.20	0.20	2152	41.29	Phenylpropanoid ester
(E)-o-Methoxycinnamaldehyde	32.32	1547	0.02	0.03	2289	44.64	Phenylpropanoid
Caryophyllene oxide	33.80	1568	0.09	0.10	1847	27.68	Sesquiterp. ether
Benzyl benzoate	42.31	1771	1.32	[1.34]	2473	48.53*	Phenolic ester
Total identified			99.74%	99.42%			

*: Two or more compounds are coeluting on this column

[xx]: Duplicate percentage due to coelutions, not taken account in the identified total

Note: no correction factor was applied

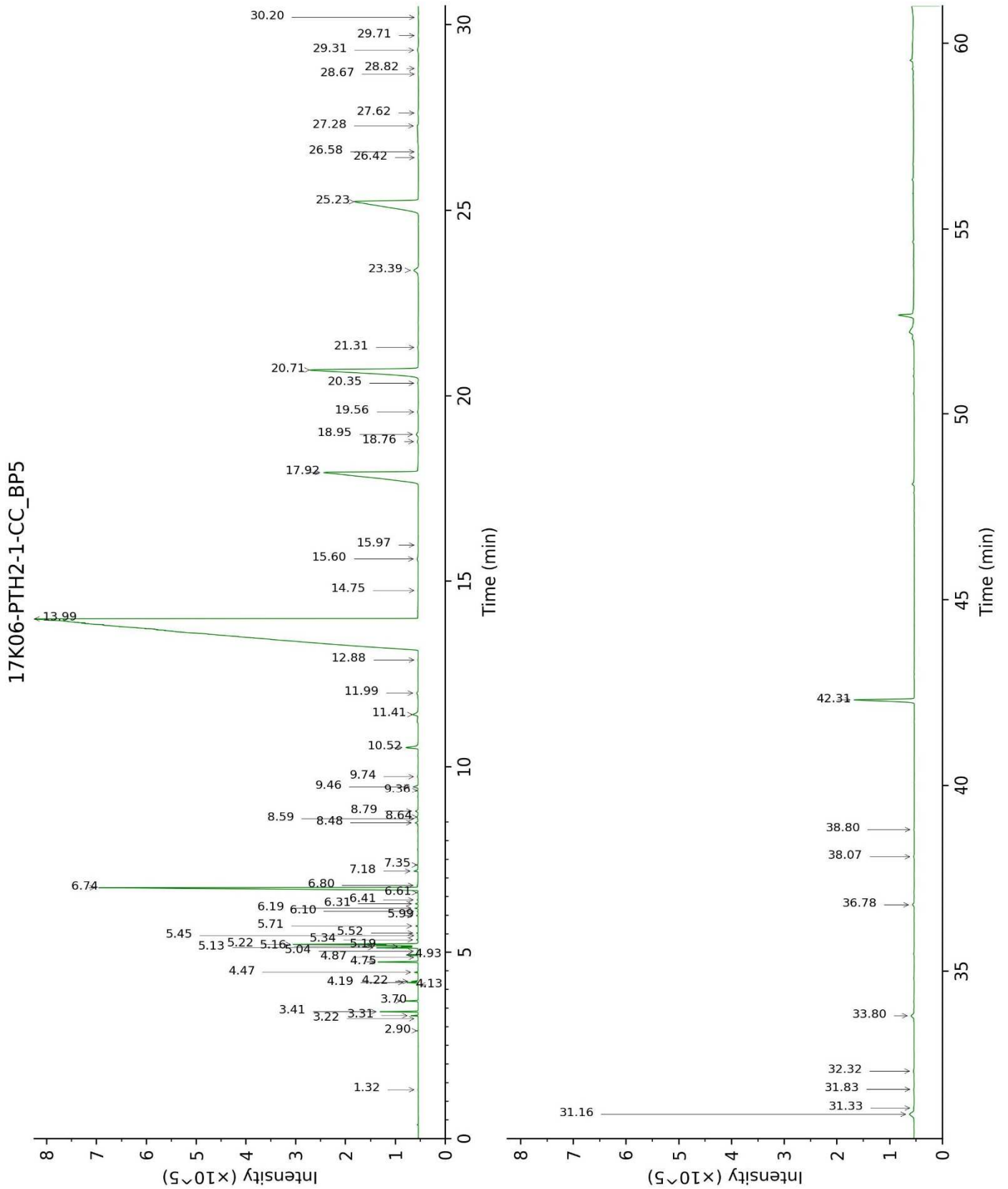
OTHER DATA

Physical aspect : Light yellow liquid

Refractive index : 1.5873 \pm 0.0003 (20 °C)

CONCLUSION

No adulterant, contaminant or diluent were detected using this method.



17K06-PTH2-1-CC_WAX

