



PLANT THERAPY
100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: TL0102

ESSENTIAL OIL: THYME LINALOOL
BOTANICAL NAME: THYMUS VULGARIS
ORIGIN: FRANCE

KEY CONSTITUENTS PRESENT IN THIS BATCH OF THYME LINALOOL OIL	%
LINALOOL	52.4
CARVACROL	13.1
THYMOL	12.3
GERANIOL	5.2
p-CYMENE	4.0
γ-TERPINENE	2.2
β-CARYOPHYLLENE	1.8

Comments from Robert Tisserand: Characteristic, fresh thyme odor profile, with constituents in expected amounts.

Date : July 5, 2017

SAMPLE IDENTIFICATION

Internal code : 17F29-PTH4-1-DM

Customer identification : Thyme Linalool - France - TL010268R

Type : Essential oil

Source : *Thymus vulgaris*

Customer : Plant Therapy

ANALYSIS

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

Analyst : Sylvain Mercier, M. Sc., chimiste

Analysis date : 2017-07-05

Checked and approved by :

Sylvain Mercier, M. Sc., chimiste 2014-005

Note: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.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.	
α-Thujene	3.33	923	0.13	0.14	954	1.07	Monoterpene
α-Pinene	3.43	930	0.17	0.15	945	1.03	Monoterpene
Camphene	3.72	947	0.09	0.08	1000	1.28	Monoterpene
Sabinene	4.15	973	0.28	0.27	1059	1.76	Monoterpene
β-Pinene	4.22	976	0.06	0.05	1043	1.60	Monoterpene
Myrcene	4.50	993	0.87	0.78	1115	2.29	Monoterpene
Octen-3-ol	4.52	994	0.06	0.05	1393	6.17	Aliphatic alcohol
α-Phellandrene	4.77*	1009	0.14	0.07	1108	2.22	Monoterpene
Δ3-Carene	4.77*	1009	[0.14]	0.04	1090	2.05	Monoterpene
α-Terpinene	4.96	1019	0.71	0.72	1123	2.38	Monoterpene
para-Cymene	5.16	1030	4.00	4.02	1206	3.45	Monoterpene
Limonene	5.19	1032	0.28	0.14	1141	2.61	Monoterpene
β-Phellandrene	5.22	1033	0.09	1.12	1144	2.65*	Monoterpene
1,8-Cineole	5.25	1035	0.91	[1.12]	1144	2.65*	Monoterp. ether
cis-β-Ocimene	5.37	1041	0.05	2.13	1187	3.20*	Monoterpene
trans-β-Ocimene	5.55	1051	0.08	0.03	1201	3.38	Monoterpene
γ-Terpinene	5.75	1062	2.16	[2.13]	1187	3.20*	Monoterpene
cis-Linalool oxide (fur.)	6.01	1076	0.08	0.07	1373	5.87	Monoterp. alcohol
cis-Sabinene hydrate	6.07	1079	0.14	0.28	1401	6.31*	Monoterp. alcohol
Terpinolene	6.21	1088	0.16	0.15	1223	3.66	Monoterpene
trans-Linalool oxide (fur.)	6.33	1094	0.15	[0.28]	1401	6.31*	Monoterp. alcohol
para-Cymenene	6.43	1099	0.03	0.02	1366	5.77	Monoterpene
Linalool	6.90*	1117	52.89	52.37	1499	8.34	Monoterp. alcohol
trans-Sabinene hydrate	6.90*	1117	[52.89]	0.54	1480	7.89	Monoterp. alcohol
Camphor	7.77	1148	0.04	0.02	1422	6.63	Monoterp. ketone
Borneol	8.64	1180	0.09	0.05	1613	12.01	Monoterp. alcohol
Terpinen-4-ol	8.83	1187	0.92	1.07	1529	9.07*	Monoterp. alcohol
α-Terpineol	9.47	1206	0.22	0.24	1622	12.33	Monoterp. alcohol
Nerol	10.57	1231	0.03	0.04	1728	17.45	Monoterp. alcohol
Carvacrol methyl ether	10.65	1233	0.32	0.23	1539	9.28	Monoterp. ether
Geraniol	11.92	1261	5.23	5.14	1783	20.73	Monoterp. alcohol
Thymol	15.09	1321	12.25	12.53	2105	38.59	Monoterp. alcohol
Carvacrol	15.55	1328	13.14	13.54	2124	39.16	Monoterp. alcohol
β-Caryophyllene	20.69	1405	1.82	1.99	1525	8.96	Sesquiterpene
Aromadendrene	22.05	1421	0.21	[1.07]	1529	9.07*	Sesquiterpene
α-Humulene	23.48	1439	0.88	0.87	1585	10.95	Sesquiterpene
Viridiflorene	26.50	1475	0.19	0.12	1618	12.20	Sesquiterpene
Caryophyllene oxide	33.83	1573	0.09	0.09	1853	25.29	Sesquiterp. ether
Total identified			98.96%	99.15%			

*: 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 : Yellow liquid

Refractive index : 1.4795 ± 0.0003 (20 °C)

CONCLUSION

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

17F29-PTH4-1-DM_BP5



