

Date : August 2, 2017

SAMPLE IDENTIFICATION

Internal code : 17G27-AMY1-1-CC

Customer identification : Citrus Limonium - Tru Gardens - Italy

Type : Essential oil

Source : *Citrus x limon*

Customer : TRUGARDENS

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 : 2017-08-02

Checked and approved by :

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

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IDENTIFIED COMPOUNDS

Identification	Column: BP5			Column: WAX			Molecular Class
	R.T.	R.I.	%	%	R.I.	R.T.	
α-Thujene	3.33	924	0.33	0.57	956	1.05	Monoterpene
α-Pinene	3.44	930	1.87	1.63	948	1.02	Monoterpene
Camphene	3.73	947	0.05	0.05	1001	1.26	Monoterpene
Sabinene	4.17	974	1.89	2.02	1056	1.74	Monoterpene
β-Pinene	4.26	979	12.22	12.25	1044	1.61	Monoterpene
Myrcene	4.51	994	1.33	1.31	1103	2.26	Monoterpene
α-Phellandrene	4.78	1009	0.03	0.02	1099	2.21	Monoterpene
Octanal	4.91	1016	0.03	0.02	1232	3.73	Aliphatic aldehyde
α-Terpinene	4.98	1020	0.14	0.17	1126	2.36	Monoterpene
Limonene	5.31*	1038	65.82	65.26	1153	2.72	Monoterpene
para-Cymene	5.31*	1038	[65.82]	0.64	1206	3.39	Monoterpene
1,8-Cineole	5.31*	1038	[65.82]	0.75	1154	2.73	Monoterp. ether
cis-β-Ocimene	5.39	1043	0.05	8.80	1192	3.21*	Monoterpene
trans-β-Ocimene	5.57	1052	0.08	0.07	1202	3.33	Monoterpene
γ-Terpinene	5.79	1064	8.66	[8.80]	1192	3.21*	Monoterpene
Terpinolene	6.23	1088	0.31	0.29	1224	3.62	Monoterpene
Linalool	6.74	1111	0.10	0.09	1487	7.90	Monoterp. alcohol
Nonanal	6.81	1114	0.11	0.10	1339	5.24	Aliphatic aldehyde
cis-Limonene oxide	7.38	1134	0.03	0.03	1370	5.73	Monoterp. ether
trans-Limonene oxide	7.51	1139	0.02	0.02	1382	5.91	Monoterp. ether
Citronellal	8.01	1157	0.06	0.07	1415	6.42	Monoterp. aldehyde
α-Terpineol	9.54	1208	0.17	0.19	1621	12.00*	Monoterp. alcohol
Decanal	9.85	1215	0.05	0.05	1444	6.90	Aliphatic aldehyde
Neral	11.24	1246	1.03	0.99	1597	11.14	Monoterp. aldehyde
Geranial	12.78	1280	1.80	1.79	1654	13.22	Monoterp. aldehyde
Neryl acetate	17.97	1365	0.42	0.41	1662	13.66	Monoterp. ester
Geranyl acetate	19.47	1388	0.40	0.38	1692	15.14	Monoterp. ester
β-Caryophyllene	20.70	1405	0.29	0.28	1528	8.85	Sesquiterpene
trans-α-Bergamotene	22.28	1424	0.32	0.32	1538	9.08	Sesquiterpene
trans-β-Farnesene	24.64	1452	0.03	[0.19]	1621	12.00*	Sesquiterpene
β-Bisabolene	29.00	1506	0.50	0.54	1670	14.01	Sesquiterpene
Oxypeucedanin	58.59	2491	0.14				Coumarin
Total identified			98.28%	99.11%			

*: 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

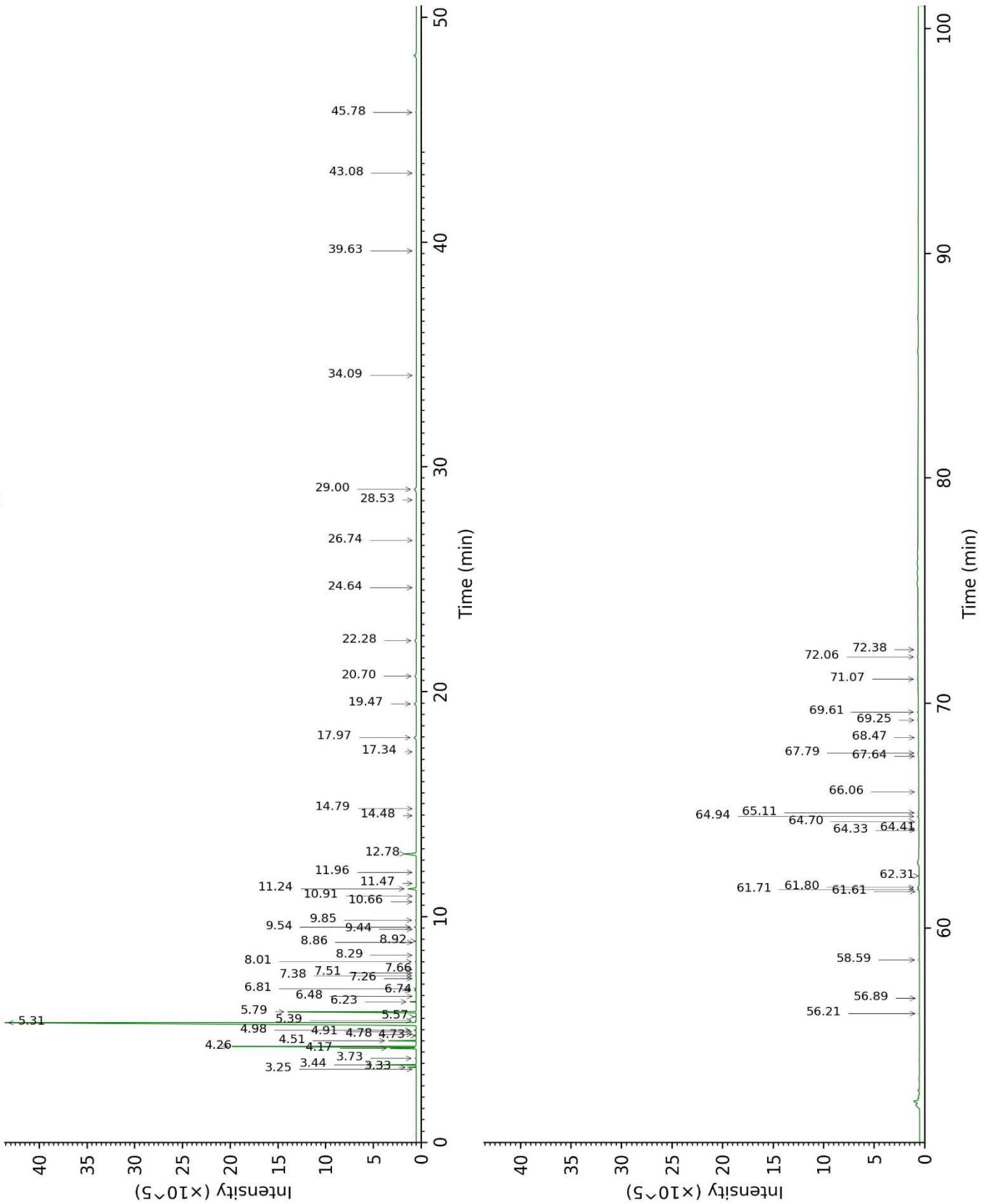
Physical aspect : Light yellow liquid

Refractive index : 1.4730 ± 0.0003 (20 °C)

CONCLUSION

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

17G27-AMY1-1-CC_BP5



17G27-AMY1-1-CC_WAX

