



PLANT THERAPY
100% PURE ESSENTIAL OILS

GC/MS BATCH NUMBER: CK0103

ESSENTIAL OIL: CORIANDER
BOTANICAL NAME: CORIANDRUM SATIVUM
ORIGIN: RUSSIA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CORIANDER OIL	%
LINALOOL	72.1
α -PINENE	5.5
CAMPHOR	5.2
γ -TERPINENE	4.7
GERANYL ACETATE	2.8
LIMONENE	2.5
GERANIOL	1.5
CAMPHENE	1.1
MYRCENE	1.0

Comments from Robert Tisserand: Excellent odor profile, smells of freshly crushed coriander seeds. Eight of nine key constituents conform to the ISO standard with alpha-terpineol being marginal - not a concern.

Date : August 8, 2016

SAMPLE IDENTIFICATION

Internal code : 16G26-PTH2-1-DM

Customer identification : Coriander - Russia - CKO10357R

Type : Essential oil

Source : *Coriandrum sativum*

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 : 2016-08-08

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.	
Tricyclene	3.16	917	0.03	0.03	925	0.80	Monoterpene
α -Thujene	3.25	923	0.04				Monoterpene
α -Pinene	3.36	930	5.46	5.36	947	0.89	Monoterpene
Camphene	3.63	946	1.05	0.97	1000	1.11	Monoterpene
Sabinene	4.06	972	0.28	0.26	1055	1.53	Monoterpene
β -Pinene	4.12	976	0.39	0.36	1038	1.39	Monoterpene
Myrcene	4.41	993	1.00	0.93	1113	2.03	Monoterpene
6-Methyl-5-hepten-2-one	4.49	998	0.02	0.02	1274	4.04	Aliphatic ketone
α -Phellandrene	4.67	1009	0.02	0.01	1107	1.95	Monoterpene
α -Terpinene	4.86	1019	0.04	0.06	1120	2.10	Monoterpene
para-Cymene	5.06	1030	0.77	0.79	1207	3.11	Monoterpene
Limonene	5.09	1032	2.46	2.19	1139	2.32	Monoterpene
β -Phellandrene	5.12	1033	0.12	0.29	1144	2.38*	Monoterpene
1,8-Cineole	5.15	1035	0.05	[0.29]	1144	2.38*	Monoterp. ether
<i>cis</i> - β -Ocimene	5.27	1042	0.01	4.57	1188	2.89*	Monoterpene
<i>trans</i> - β -Ocimene	5.46	1052	0.02	0.06	1201	3.04	Monoterpene
γ -Terpinene	5.65	1063	4.72	[4.57]	1188	2.89*	Monoterpene
<i>cis</i> -Linalool oxide (fur.)	5.94	1079	0.08	0.08	1376	5.51	Monoterp. alcohol
Terpinolene	6.11	1088	0.58	0.52	1223	3.32	Monoterpene
<i>trans</i> -Linalool oxide (fur.)	6.26	1096	0.06	0.06	1407	5.95	Monoterp. alcohol
Linalool	6.85	1121	72.05	72.61	1503	7.76	Monoterp. alcohol
Camphor	7.71	1153	5.20	5.27	1422	6.22	Monoterp. ketone
Citronellal	7.88	1159	0.03	0.03	1410	6.00	Monoterp. aldehyde
Borneol	8.58	1185	0.15	0.12	1617	11.07	Monoterp. alcohol
Terpinen-4-ol	8.68	1189	0.10	0.09	1528	8.39	Monoterp. alcohol
α -Terpineol	9.35	1209	0.25	0.25	1623	11.35	Monoterp. alcohol
Nerol	10.54*	1236	0.02	0.03	1726	16.09*	Monoterp. alcohol
Citronellol	10.78	1242	0.06	0.05	1705	15.00	Monoterp. alcohol
Geraniol	11.89	1266	1.50	1.49	1777	19.10	Monoterp. alcohol
Geranial	12.49	1280	0.02	0.02	1646	12.40	Monoterp. aldehyde
Citronellyl formate	12.79	1287	0.01	0.01	1558	9.30	Monoterp. ester
Myrtenyl acetate	14.97	1326	0.10	0.10	1602	10.65	Monoterp. ester
Neryl acetate	17.62	1367	0.02	0.04	1656	12.84	Monoterp. ester
Geranyl acetate	19.17	1391	2.75	2.72	1689	14.31	Monoterp. ester
β -Caryophyllene	20.19	1405	0.05	0.08	1506	7.81	Sesquiterpene
Total identified			99.51%	99.47%			

*: 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 : Clear liquid

Refractive index : 1.4635 ± 0.0003 (20 °C)

CONCLUSION

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



