

GC/MS BATCH NUMBER: CB8101

ESSENTIAL OIL: CEDARWOOD TEXAS
BOTANICAL NAME: JUNIPERUS MEXICANA
ORIGIN: USA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF CEDARWOOD TEXAS OIL	%
THUJOPSEN	42.3
α -CEDROL	16.9
β -CEDRENE	2.7
WIDDROL	2.5
β -HIMACHALENE	2.4
β -ALASKENE	2.2
CUPARENE	2.1
α -ACORENOL	1.6
γ -HIMACHALENE	1.4
THUJOPSENAL?	1.0

Comments from Robert Tisserand: Fresh, dry, pencil-woody odor profile.

Date : December 15, 2017

SAMPLE IDENTIFICATION

Internal code : 17L14-PTH6-1-CC

Customer identification : Cedarwood Texas - USA - CB810163R

Type : Essential oil

Source : *Juniperus mexicana*

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 : 2017-12-15

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Note: This report may not be published, including online, without the written consent from Laboratoire PhytoChemia.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.	
α-Thujene	3.30	919	0.02	0.19	945	1.12*	Monoterpene
α-Pinene	3.43	927	0.20	[0.19]	945	1.12*	Monoterpene
Camphene	3.69	943	0.03	0.03	994	1.34	Monoterpene
Thuja-2,4(10)-diene	3.81	950	0.02	0.02	1053	1.90*	Monoterpene
Sabinene	4.15	969	tr	[0.02]	1053	1.90*	Monoterpene
Isopropenylbenzene	4.44	987	0.02				Normonoterpene
Δ3-Carene	4.77	1005	0.04	0.03	1078	2.20	Monoterpene
para-Cymene	5.18	1028	0.02	0.02	1206	3.67	Monoterpene
Terpinolene	6.22	1084	0.01	0.01	1223	3.93	Monoterpene
para-Cymenene	6.44	1097	0.01	0.01	1362	6.03	Monoterpene
α-Campholenal	7.29	1128	0.01				Monoterp. aldehyde
trans-Pinocarveol	7.66	1141	0.03	0.13	1568	11.34	Monoterp. alcohol
Pinocamphone	8.18	1160	0.02	0.08	1437	7.47*	Monoterp. ketone
Terpinen-4-ol	8.81	1183	0.02	2.87	1518	9.49*	Monoterp. alcohol
meta-Cymen-8-ol	9.30	1200	0.07	0.10	1780	22.64	Monoterp. alcohol
α-Terpineol	9.53	1205	0.07	2.46	1624	13.62*	Monoterp. alcohol
Verbenone	9.88	1212	0.05	0.38	1596	12.35*	Monoterp. ketone
diepi-α-Cedrene	17.98	1361	0.05	[0.08]	1437	7.47*	Sesquiterpene
α-Duprezianene	18.32	1367	0.30	0.31	1452	7.80	Sesquiterpene
Isolongifolene	18.43	1368	0.02	[0.08]	1437	7.47*	Sesquiterpene
β-Elemene	19.03	1377	0.17	[2.87]	1518	9.49*	Sesquiterpene
α-Chamipinene	19.28	1381	0.10				Sesquiterpene
Longifolene	19.64	1386	0.08	0.07	1473	8.30	Sesquiterpene
2-epi-α-Cedrene	19.77	1388	0.07	9.90	1497	8.87*	Sesquiterpene
α-Cedrene	20.54*	1400	10.02	[9.90]	1497	8.87*	Sesquiterpene
β-Funebrene?	20.54*	1400	[10.02]	0.57	1511	9.22*	Sesquiterpene
β-Caryophyllene	20.74	1402	0.25	[0.57]	1511	9.22*	Sesquiterpene
β-Cedrene	20.98	1405	2.69	[2.87]	1518	9.49*	Sesquiterpene
Thujopsen	22.25	1420	42.26	42.76	1546	10.52	Sesquiterpene
α-Himachalene	22.96	1428	0.68	0.79	1555	10.85	Sesquiterpene
α-Acoradiene	24.36	1445	0.72	0.80	1588	12.06	Sesquiterpene
β-Acoradiene	24.62	1448	0.34	[0.38]	1596	12.35*	Sesquiterpene
β-Chamigrene	24.99	1453	0.13	[2.46]	1624	13.62*	Sesquiterpene
γ-Himachalene	25.49	1458	1.36	1.48	1607	12.77	Sesquiterpene
α-Chamigrene	26.77	1474	0.17	2.77	1638	14.33*	Sesquiterpene
ar-Curcumene	27.05	1477	0.19	0.22	1694	17.22	Sesquiterpene
β-Alaskene	27.32	1480	2.23	[2.77]	1638	14.33*	Sesquiterpene
β-Himachalene	27.71	1485	2.43	[2.46]	1624	13.62*	Sesquiterpene
Cuparene	28.37	1493	2.12	1.77	1714	18.31	Sesquiterpene
α-Alaskene	28.57	1495	0.52				Sesquiterpene
7-epi-α-Selinene	28.89	1499	0.18	0.25	1654	15.17	Sesquiterpene

δ-Cadinene	29.50	1508	0.12	0.12	1673	16.18	Sesquiterpene
<i>trans</i> -Calamenene	29.87	1513	0.13	0.21	1732	19.46	Sesquiterpene
<i>trans</i> -γ-Bisabolene	30.37	1520	0.20	0.32	1683	16.64	Sesquiterpene
γ-Cuprenene	30.52	1522	0.33	0.25	1616	13.21	Sesquiterpene
δ-Cuprenene	31.19	1532	0.26				Sesquiterpene
allo-Cedrol	34.93	1584	0.44	18.25	1990	35.82*	Sesquiterp. alcohol
α-Cedrol	35.84*	1597	19.37	[18.25]	1990	35.82*	Sesquiterp. alcohol
Widdrol	35.84*	1597	[19.37]	2.52	2020	37.16	Sesquiterp. alcohol
epi-Cedrol	36.31	1608	0.43				Sesquiterp. alcohol
α-Acorenol	36.99	1624	1.63	1.87	2010	36.76	Sesquiterp. alcohol
β-Acorenol	37.06	1626	0.12	0.13	2057	38.36	Sesquiterp. alcohol
Himachalol	37.27	1631	0.78	0.54	2078	39.01	Sesquiterp. alcohol
Selin-11-en-4-α-ol	37.88	1646	0.54	0.42	2115	40.16	Sesquiterp. alcohol
Cedr-8-en-15-ol?	38.28	1656	0.71				Sesquiterp. alcohol
Cedr-8-en-13-ol	39.58	1688	0.36	0.29	2266	43.98	Sesquiterp. alcohol
Thujopsenal?	39.95	1697	1.04				Sesquiterp. aldehyde
Total identified			94.18%	92.94%			

*: 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 : Faintly yellow liquid

Refractive index : 1.5063 ± 0.0003 (20 °C)

CONCLUSION

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

17L14-PTH6-1-CC_BP5



