



PLANT THERAPY  
100% PURE ESSENTIAL OILS

## GC/MS BATCH NUMBER: LP0100

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**ESSENTIAL OIL:** LEMON MYRTLE  
**BOTANICAL NAME:** BACKHOUSIA CITRIODORA  
**ORIGIN:** AUSTRALIA

KEY CONSTITUENTS PRESENT IN THIS BATCH OF LEMON MYRTLE OIL	%
GERANIAL	56.0
NERAL	37.1
$\beta$ -CARYOPHYLLENE	1.2
6-METHYL-5-HEPTEN-2-ONE	1.0

Comments from Robert Tisserand: Similar lemony odor to Lemongrass, but more refined, more complex. Meets the Australian standard (there is no ISO standard).

**Date :** May 1, 2017

*SAMPLE IDENTIFICATION*

**Internal code :** 17D24-PTH7-1-DM

**Customer identification :** Lemon Myrtle - Australia - LP010068R

**Type :** Essential oil

**Source :** *Backhousia citriodora*

**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 :** 2017-04-28

Checked and approved by :

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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.	
β-Pinene	4.19	975	0.01	0.01	1040	1.74	Monoterpene
Myrcene	4.46	991	0.20	0.19	1117	2.46	Monoterpene
6-Methyl-5-hepten-2-one	4.51	994	0.98	0.97	1278	4.67	Aliphatic ketone
α-Phellandrene	4.72	1006	0.01	0.01	1113	2.41	Monoterpene
Limonene	5.14	1029	0.03	0.03	1142	2.78	Monoterpene
Linalool	6.61	1106	0.56	0.59	1494	8.66	Monoterp. alcohol
exo-Isocitral	7.66	1144	0.04				Monoterp. aldehyde
Citronellal	7.90	1153	0.38	0.35	1419	6.87	Monoterp. aldehyde
(Z)-Isocitral	8.18	1164	0.20	0.14	1477	8.26	Monoterp. aldehyde
(E)-Isocitral	8.79	1186	0.32	0.24	1506	8.93	Monoterp. aldehyde
α-Terpineol	9.29	1203	0.35	0.40	1628	13.33	Monoterp. alcohol
Citronellol	10.86	1237	0.10	0.09	1710	17.61	Monoterp. alcohol
Neral	11.31	1247	37.14	37.30	1610	12.60	Monoterp. aldehyde
Piperitone	11.71	1256	0.08	0.11	1622	13.06	Monoterp. ketone
Geraniol	11.92	1261	0.85	0.88	1785	22.29	Monoterp. alcohol
Geranial	12.97	1284	55.98	56.15	1662	15.08*	Monoterp. aldehyde
Unknown (m/z = 43, 69 (80), 41 (80), 109 (40)... 152 (5))	13.44	1295	0.06				
Unknown (m/z = 82, 59 (44), 41 (40), 95 (31)...) )	16.55	1344	0.12	0.09	1862	27.62	
α-Copaene	17.58	1359	0.07	0.08	1432	7.18	Sesquiterpene
Geranic acid	18.61	1375	0.25	0.29	2258	43.46	Monoterp. acid
β-Elemene	18.77	1377	0.11	0.10	1526	9.52	Sesquiterpene
Unknown (m/z = 81, 59 (97), 85 (84), 41 (82), 69 (53), 82 (45)...) )	19.16	1383	0.16	0.13	1927	32.32	
β-Caryophyllene	20.44	1402	1.18	1.21	1523	9.41	Sesquiterpene
α-Humulene	23.17	1435	0.09	0.09	1585	11.71	Sesquiterpene
Bicyclogermacrene	26.58	1476	0.09	[56.15]	1662	15.08*	Sesquiterpene
(E,E)-α-Farnesene	28.61	1500	0.03	0.04	1693	16.73	Sesquiterpene
δ-Cadinene	29.05	1506	0.03	0.03	1675	15.80	Sesquiterpene
Spathulenol	33.54*	1569	0.11	0.03	2022	36.69	Sesquiterp. alcohol
Caryophyllene oxide	33.54*	1569	[0.11]	0.08	1850	26.69	Sesquiterp. ether
<b>Total identified</b>			<b>99.19%</b>	<b>99.41%</b>			

\*: 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 :**  $1.4860 \pm 0.0003$  (20 °C)

*CONCLUSION*

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



