



PALMER PLANTATIONS



“Craigie Lea” Leeville via Casino NSW 2470 Australia

ABN: 51 901 503 097

M. T. Palmer
Phone: 61 2 6962 7411
Fax: 61 2 6962 4841
Email: pme@pme.net.au
www.pme.net.au/teatree.html

Postal address:
P O Box 5035,
Griffith NSW 2680
Australia

L. E. Hicks
Phone: 61 2 6664 1380
Fax: 61 2 6664 1381
lehicks@bigpond.com

Typical analysis Palmer Plantations Tea Tree Oil.

As reported on:

REPORT NUMBER: WN04/3848

CERTIFICATE OF ANALYSIS. AUSTRALIAN TEA TREE OIL – TERPINEN-4 – OL TYPE

METHOD USED – AREA NORMALISATION BASED ON ISO 4730: 1996

			ISO 4730 range %
1	α -pinene %	2.6	1-6
2	sabinene %	0.1	tr – 3.5
3	α -terpinene %	10.0	5 - 13
4	limonene %	1.0	0.5 – 4
5	p-cymene %	2.1	0.5 – 12
6	1,8-cineole %	2.8	0 – 15
7	g-terpinene %	21.6	10 – 28
8	terpinolene %	3.5	1.5 – 5
9	terpinen-4-ol %	40.6	>30
10	α -terpineol %	2.6	1.5 – 8
11	aromadendrene %	1.3	tr – 7
12	d-cadinene %	0.9	tr – 8
13	globulol %	0.2	tr – 3
14	viridiflorol %	0.2	tr – 1.5

Gas Chromatography Conditions

Detector: Flame ionization at 300°C

Column: 35% phenyl – 65% methyl polysiloxane 60m x 0.25mm x 0.25 μ m

Injector temperature: 200°C

Carrier: Hydrogen at 200kPa

Temperature program: 60°C (hold 3 minute) to 240°C at 9°C/min

Injection port: Nominal split 1:50 at 250°C

Quantitation: Area Normalisation % of total FID response

Test	Result	ISO 4730 range
Appearance	Conforms	Clear momile without visible water
Colour		Colourless to pale yellow
Odour		Characteristic
Relative density (20°C)	0.893	0.885 – 0.906
Refractive index	1.477	1.475 – 1.482
Optical rotation (20°C)	9.39	+5° - +15°
Miscibility in 85% (v/v) ethanole 20°C	0.48	Less than 2 volumns