

Owner GLENCO PRODUCTS (NSW) PTY LTD
PORT MACQUARIE
N.S.W. AUSTRALIA

Submitted: 20.6.07
Received: 22.6.07

Samples received: 1 x essential oil
The samples have been assigned the following laboratory numbers. Lab No 6113 / Vat#5 - 17.6.07

CERTIFICATE OF ANALYSIS
AUSTRALIAN TEA TREE OIL - TERPINEN-4 - OL TYPE
METHOD 1302

Sample ID	Vat#5-17.6.07	ISO 4730
Laboratory No	6113	Range %
1 α -pinene %	2.1	1 - 6
2 sabinene %	0.5	tr - 3.5
3 α -terpinene %	9.5	5 - 13
4 limonene %	0.8	0.5 - 1.5
5 p-cymene %	1.3	0.5 - 8
6 1,8-cineole %	2.3	tr - 15
7 γ -terpinene %	19.9	10 - 28
8 terpinolene %	3.4	1.5 - 5
9 terpinen-4-ol %	43.3	30 - 48
10 α -terpineol %	3.2	1.5 - 8
11 aromadendrene %	1.2	tr - 3
12 ledene %	0.8	tr - 3
13 δ -cadinene %	1.0	tr - 3
14 globulol %	0.2	tr - 1
15 viridiflorol %	0.1	tr - 1

Gas Chromatography Conditions

Detector: Flame Ionization at 300°C
Column: 35% phenyl - 65% methyl polysiloxane 60 m 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°Ccs
Quantitation: Area Normalisation % of total FID response

Test	Result	ISO 4730 Range
Appearance	Conforms	Clear mobile without visible water
Colour	Conforms	Colourless to pale yellow
Odour	Conforms	Characteristic
Relative density (20°C)	0.894	0.885 - 0.906
Refractive Index (20°C)	1.478	1.475 - 1.482
Optical rotation (20°C)	10.23	+5 ° - +15 °
Miscibility in 85% (v/v) ethanol 20°C	0.54	Less than 2 volumes

Date of Analysis: 22 June, 2007

Registered TGA Laboratory Lic No 55167

OP, OC and SP residue analysis to follow on WN07/1965.



MICHAEL TREVASKIS
TECHNICAL OFFICER
25 JUNE, 2007 MAT

FINAL REPORT C CASSEGRAIN
ESSENTIAL OILS RESEARCH

- *This report supersedes any previous report with this Report Number (see top right of this page).*
- *These results apply to the sample(s) as provided.*
- *This report should not be reproduced except in full.*
- *Samples will be retained for one year from the date of the final report. Samples will then be discarded. Clients wishing to recover their samples must contact the laboratory within this period. The laboratory will return residual samples at client expense when requested.*
- *Test results and findings may be provided to authorised staff and used for statistical, surveillance, extension, certification and regulatory purposes in accordance with Departmental policies. The information assists disease and residue control programs and underpins market access for agricultural products. The source of the information will remain confidential unless otherwise required by Law or regulatory policies.*

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Submitter C CASSEGRAIN

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Essential Oil Pesticide Analysis


Method	Number	Date of Analysis
Essential Oil pesticide screen	2713	28/6/07

Laboratory No		Limit of reporting	6113
Sample ID	Unit		5-17.6.07
Organochlorines	mg/L	0.3	<0.3
Organophosphates	mg/L	0.1	<0.1
Synthetic pyrethroids	mg/L	0.3	<0.3

Organochlorine analysis screens for the following chemicals. aldrin, BHCs, chlordane, DDT, DDD, DDE, dieldrin, α -endosulfan, β -endosulfan, endosulfan sulfate, HCB, heptachlor, heptachlor epoxide and lindane.

Organophosphate analysis screens for the following chemicals - bromophos ethyl, carbophention, chlorpyrifos, diazinon, dichlorvos, dimethoate, dioxathion, ethion, fenitrothion, fenthion, malathion, and parathion.

Synthetic pyrethroid analysis screens for the following chemicals - cypermethrin, deltamethrin, fenvalerate, permethrin and β -cyfluthrin.



TONY TYLER
ANALYTICAL CHEMIST
13 JULY, 2007 RG

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