

CERTIFICATE OF ANALYSIS

SAMPLE	Essential Oil of Melaleuca alternifolia
CUSTOMER	Projects Etc Pty (Japan)
CERTIFICATION DATE	09 June 2016
LABORATORY REFERENCE	ARL162099
CUSTOMER LOT/BATCH No.	JF0316
JOB No.	A160931
TEST METHOD	Ph.Eur.2.2.28

Sample ID	Laboratory Reference	Isomeric Ratio						
		(-) limonene	(+) limonene	(+) terpinen-4-ol	(-) terpinen-4-ol	(-) α -terpineol	(+) α -terpineol	terpinen-4-ol ratio (+)/(-)
Reference TTO	R160608	37.80	62.20	68.24	31.76	26.30	73.70	2.15
JF0316	ARL162099	37.58	62.42	67.65	32.35	26.64	73.36	2.09

COMMENTS

The test sample, Essential Oil of Melaleuca alternifolia JF0316, conforms to the chiral terpinen-4-ol (+)/(-) proportion of our reference TTO.

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MS SAMANTHA MORROW
ANALYTICAL OFFICER

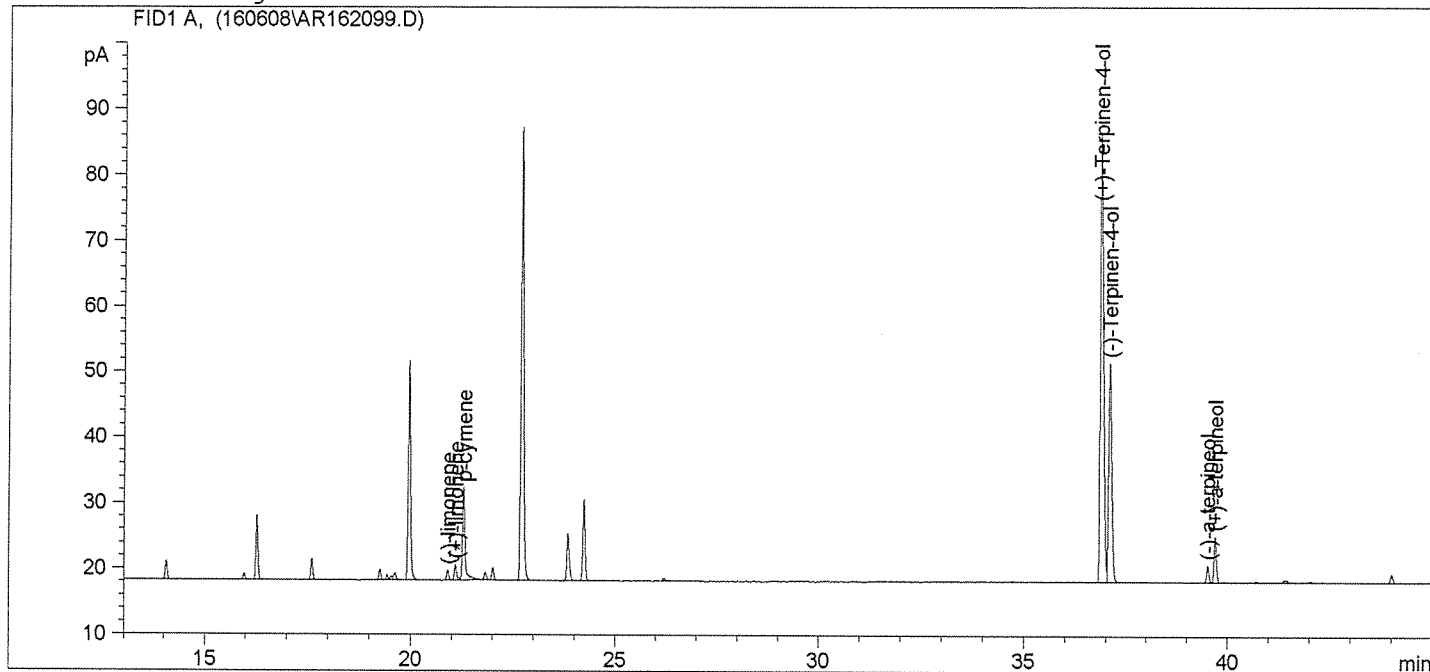
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MR ASHLEY DOWELL
MANAGER - ARL

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Injection Date   : 6/8/2016 5:28:53 PM           Seq. Line :    4
Sample Name     : TTO JF0316                   Location  : Vial 84
Acq. Operator  : SM                           Inj      :    1
                                           Inj Volume: 1 µl

Acq. Method    : D:\METHODS\QAMETH~1\CHIT-4OL.M
Last changed   : 2/21/2016 9:46:15 AM by SM
Analysis Method: D:\METHODS\QAMETH~1\CHIT-4OL.M
Last changed   : 6/9/2016 8:22:34 AM by CJ
                (modified after loading)
  
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chiral CYDEX-B general



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                          Area Percent Report
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Sorted By           :      Signal
Calib. Data Modified :      1/6/2016 11:15:53 AM
Multiplier          :      1.0000
Dilution            :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
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Signal 1: FID1 A,

Peak #	RetTime [min]	Type	Width [min]	Area [pA*s]	Area %	Name
1	20.915	PP	0.0558	5.57494	0.43671	(-)-limonene
2	21.103	VV	0.0601	9.26040	0.72541	(+)-limonene
3	21.302	VB	0.0645	59.38781	4.65214	p-cymene
4	36.880	PV +	0.0787	369.83926	28.97131	(+)-Terpinen-4-ol
5	37.101	VB +	0.0842	176.82634	13.85167	(-)-Terpinen-4-ol
6	39.518	BV	0.0630	10.26679	0.80425	(-)-a-terpineol
7	39.698	VV	0.0627	28.26989	2.21452	(+)-a-terpineol

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Totals :                      659.42543  51.6560
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Results obtained with enhanced integrator!

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*** End of Report ***
  
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