

CERTIFICATE OF ANALYSIS

SAMPLE	Germ-X-it TTO (Corban)
CUSTOMER	Australian Tea Tree Industry Association
CERTIFICATION DATE	22 October 2015
CUSTOMER LOT/BATCH No.	15F01
LABORATORY REFERENCE	ARL154989
JOB No.	A151708
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	R1510201	39.03	60.97	68.54	31.46	26.50	73.50	2.18
Germ-X-it TTO (Corban)	ARL1549891	39.50	60.50	68.34	31.66	24.74	72.26	2.16

COMMENTS

The test sample, Germ-X-it TTO (Corban) 15F01, conforms to the chiral terpinen-4-ol (+)/(-) ratio of our reference TTO.



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MS SAMANTHA MORROW
LABORATORY ASSISTANT



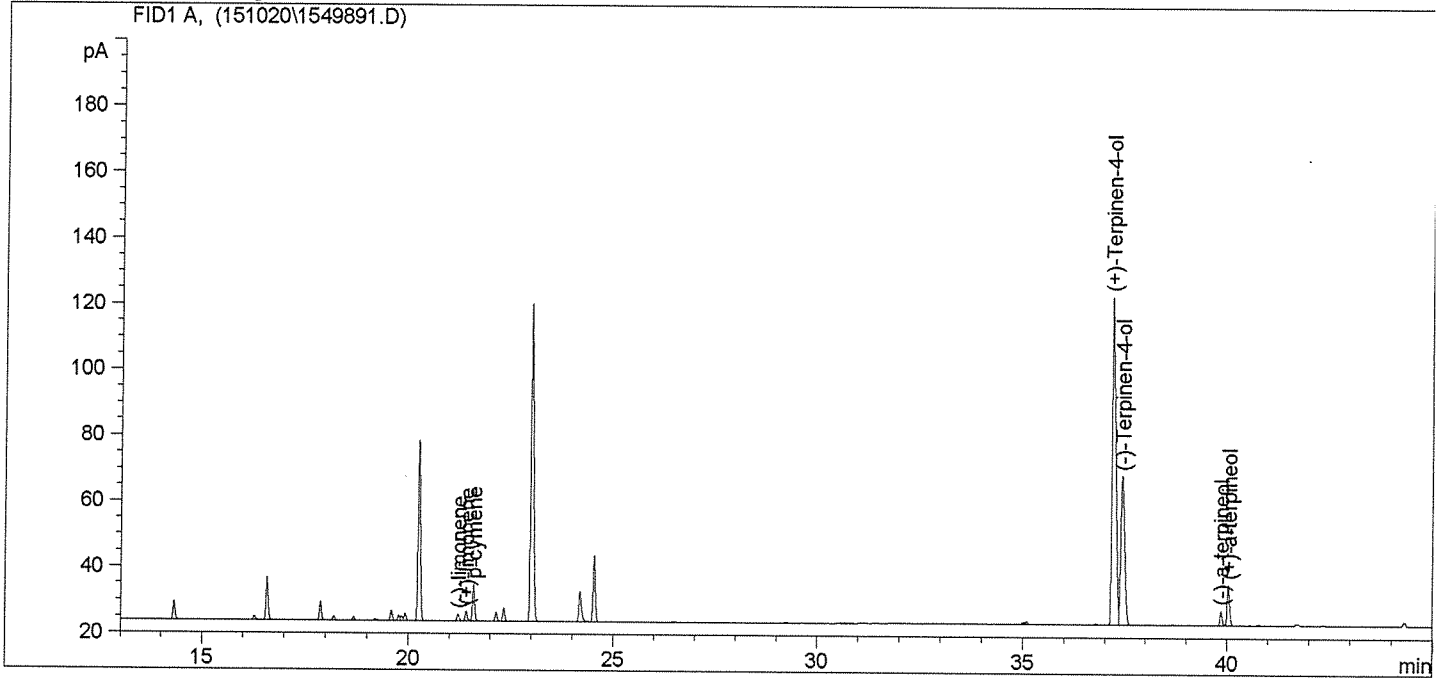
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MR ASHLEY DOWELL
MANAGER - ARL

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Injection Date   : 10/20/2015 5:19:57 PM          Seq. Line :    3
Sample Name     : TTO 15F01                      Location  : Vial 3
Acq. Operator   : SAM                           Inj       :    1
                                           Inj Volume: 1 µl

Acq. Method    : D:\METHODS\QAMETH~1\CHIT-4OL.M
Last changed   : 9/25/2015 11:13:21 AM by SM
Analysis Method: D:\METHODS\QAMETH~1\CHIT-4OL.M
Last changed   : 10/21/2015 9:04:25 AM by das
                (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 : 10/19/2015 1:39:19 PM
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	21.227	BP	0.0541	6.89086	0.34840	(-)-limonene
2	21.421	BV	0.0562	10.55531	0.53368	(+)-limonene
3	21.603	VB	0.0582	40.30820	2.03799	p-cymene
4	37.182	BV +	0.0856	625.85468	31.64337	(+)-Terpinen-4-ol
5	37.426	VB +	0.0991	289.98270	14.66160	(-)-Terpinen-4-ol
6	39.865	BV	0.0601	16.57068	0.83782	(-)-a-terpineol
7	40.040	VB	0.0623	50.41794	2.54914	(+)-a-terpineol

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Totals :                      1040.58035  52.6120
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Results obtained with enhanced integrator!

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*** End of Report ***
  
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