



## CERTIFICATE OF ANALYSIS Pure Australian Tea Tree Oil

**Certification Date:** 18 February 2015  
**Batch No:** AES1213A  
**Product Name:** Australian Tea Tree Oil  
**Botanical Name:** *Melaleuca alternifolia*  
**Country of Origin:** Australia  
**Part of Plant Used:** Leaves and twigs  
**Extraction Method:** Steam distilled (water)  
**INCI Name:** Melaleuca Alternifolia (Tea Tree) Leaf Oil  
**Appearance:** Clear, colorless to yellow, mobile liquid  
**Odor:** Warm, spicy, earthy  
**Specific Gravity (20°C):** 0.897  
**Refractive Index (20°C):** 1.4786  
**Optical Rotation (20°C):** +10.40  
**Major Chemical Constituents:**

Components:	Result (%):	ISO 4730 (%):
$\alpha$ -pinene	2.41	1 - 6
sabinene	0.16	trace - 3.5
$\alpha$ -terpinene	8.04	5 - 13
limonene	0.93	0.5 - 1.5
<i>p</i> -cymene	4.16	0.5 - 8
1,8-cineole	2.2	trace - 15
$\gamma$ -terpinene	19.31	10 - 28
terpinolene	3.15	1.5 - 5
terpinen-4-ol	42.84	30 - 48
$\alpha$ -terpineol	2.83	1.5 - 8
aromadendrene	1.34	trace - 3
ledene (syn. viridiflorene)	0.95	trace - 3
$\delta$ -cadinene	1.01	trace - 3
globulol	0.20	trace - 1
viridiflorol	0.17	trace - 1

**Date of Manufacture:** January 2015  
**Date of Expiry:** January 2018 - then retest at 6 monthly intervals

**Down Under Enterprises International Pty Ltd**  
Suite 3, 8 Manning Road, Double Bay  
Sydney, NSW 2028 Australia  
Australia Phone: +61 2 9539 7801, Fax: +61 3 8080 3207  
China Toll Free/Fax: +86 400 120 0983  
[info@DownUnderEnterprises.com](mailto:info@DownUnderEnterprises.com)

**Down Under Enterprises, Inc.**  
9401 Mentor Ave #125  
Mentor, OH 44060 USA  
US Toll Free: +1 866 473 6560  
US Fax: +1 440 299 0014  
[www.DownUnderEnterprises.com](http://www.DownUnderEnterprises.com)