



**DESERT WHALE  
JOJOBA COMPANY**

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**CERTIFICATE OF ANALYSIS**

PRODUCT NAME : **TEA TREE OIL – PHARMACEUTICAL GRADE**  
 INCI NAME : MELALEUCA ALTERNIFOLIA (TEA TREE) LEAF OIL  
 LOT NUMBER : ETO – 1207 – 2  
 DATE OF MANUFACTURE : June 26, 2007      DATE OF EXPIRATION : June 26, 2010

| PRODUCT SPECIFICATION           | ANALYTICAL METHOD | RESULT |
|---------------------------------|-------------------|--------|
| Chromatographic Profile, area % | ISO 11024-1       |        |
| α - pinene                      | 1 – 6             | 2.2    |
| Sabinene                        | 4 max.            | 0.2    |
| α – terpinene                   | 5 – 13            | 8.9    |
| Limonene                        | 4 max.            | 0.9    |
| p – cymene                      | 12 max.           | 1.9    |
| 1,8 – cineole                   | 4 max.            | 2.8    |
| γ - terpinene                   | 10 – 28           | 19.6   |
| Terpinolene                     | 1 – 5             | 3.2    |
| Terpinen 4 –ol                  | 37 min.           | 42.5   |
| α - terpineol                   | 1 – 8             | 3.2    |
| Aromadendrene                   | 7 max.            | 1.5    |
| δ - cadinene                    | 8 max.            | 1.1    |
| Globulol                        | 3 max.            | 0.3    |
| Viridiflorol                    | 2 max.            | 0.2    |

| TYPICAL PROPERTY             | ANALYTICAL METHOD               | RESULT                   |
|------------------------------|---------------------------------|--------------------------|
| Refractive Index, 20 °C      | ISO 280                         | 1.4750 – 1.4820<br>1.478 |
| Relative Density, 20/20 °C   | ISO 279                         | 0.890 – 0.906<br>0.897   |
| Color, Lovibond (5 ¼ “ cell) | AOCS Official Method, Cc 13e-92 | 0.7 Y / 0.3 R            |
| Color, Gardner               | AOCS Official Method, Td 1a-64  | 1-                       |

Date: December 26, 2007

*Kurt Schwamberger*  
Kurt Schwamberger  
Quality Assurance Manager