

#### THE PUREST TEA TREE OIL IN THE WORLD.

# PRODUCT DATA SHEET – PREMIUM GRADE

#### TEA TREE OIL CHARACTERIZED BY EXCEPTIONAL COMPOSITIONAL PURITY

Premium Grade Tea Tree Oil is MCNE's flagship product distilled from the plantation crops at our Northern NSW estates. This grade of oil is characterized by very low p-cymene and cineole content along with comparatively very high levels of the terpinen-4-ol content. Premium Grade simply arises from Melaleuca alternifolia plants that have been carefully selected and propagated throughout much of the plantation. Nature has dictated the premium composition — no additional processing is applied beyond the single-pass steam distillation of freshly harvested plants.

#### **Product Classifications**

CAS Number: 68647-73-4 and 85085-48-9

EINECS Number: 285-377-1

Dangerous Goods: Class 3 Flammable Liquid. Packaging group III

UN Number: 2319 Terpene hydrocarbon N.O.S

[European Community only: UN 1169 Extracts,

aromatic, liquid]

INCI name : Melaleuca alternifolia

#### Storage and Handling:

Premium Grade is classified as a flammable liquid and should be stored in cool dry areas away from direct sunlight and in accordance with all DG storage regulations and requirements.

#### Shelf Life:

Three years from date of distillation when stored in Stainless Steel vessels in a cool dry place with a nitrogen blanket. If another packaging type is chosen, we recommend decanting the Tea Tree Oil into Stainless Steel containers and following the recommended procedure as stated above, once the shipment is received.

#### Packaging:

MCNE Premium Grade Tea Tree Oil is available in 20kg, 55kg and 185kg stainless steel or Teflon-lined mild steel drums. Also in 20kg fluorinated plastic drums and 900Kg Plastic Container.

#### **Specifications**

Complete compositional results of each batch will be provided separately alongside corresponding European Pharmacopeia 2016 specification for Australian tea tree oil. MCNE's Premium Grade Tea Tree oil meets the European Pharmacopeia specification. Summary of key components:

 Terpinen-4-ol:
 min. 37% (typically >39%)

 1,8-Cineole:
 max. 4.5% (typically <3.5%)</td>

 p-Cymene:
 max. 4.0% (typically <3%)</td>

Appearance and odour: Clear, colourless, single phase

mobile liquid

Odour: Characteristic mild aroma

 Relative density @ 20oC:
 0.885 - 0.906 

 Flash point (Closed cup P.M.):
  $57-60^{\circ}$ C

 Refractive Index @  $20^{\circ}$ C:
 1.475 - 1.482 

 Optical Rotation @  $20^{\circ}$ C:
  $+5^{\circ} - +15^{\circ}$  

 Terpinen-4-ol chiral ratio:
 1.9 - 2.1(+) : 1.0(-) 

Peroxide value (milli eq.O2/kg): max. 7

Part of Plant distilled Leaves and Twiggs

## **Genetically Modified Organisms**

As with all products from the Main Camp estate, this product is completely GMO free and complies with EEC regulations 1829 &1830/2003.

### **Material Safety Data Sheet**

MCNE provides separately, a comprehensive MSDS for this product that provides essential further information about how this product should be handled and the various kind of effects it can impart to humans and the environment.



