

MATERIAL SAFETY DATA SHEET.

1. IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY.

PRODUCT NAME: **TEA TREE OIL**

SUPPLIER: Norfolk Trading 1 Rigbys Crt Norwich NR2 1NT

Telephone +44 (0)1603 610883

2. COMPOSITION / INFORMATION ON INGREDIENTS.

DEFINITION/BOTANICAL ORIGIN: Obtained by steam distillation from the leaves & twigs of *Melaleuca alternifolia* L. (Fam. *Myrtaceae*).

H-No: 3301.29

CAS No: 85085-48-9

Status: natural

CoE No: 456

FEMA: 3064

Additives: none

FDA:

IFRA: not restricted

Application:

RIFM: monograph

EINECS: 285-377-1

FCCIV: official

INCI name: MELALEUCA ALTERNIFOLIA

3. HAZARDS IDENTIFICATION:

Xn. Harmful.

4. FIRST-AID MEASURES:

INHALATION: Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.

EYE CONTACT: Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.

SKIN CONTACT: Remove contaminated clothes. Wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.

INGESTION: Rinse mouth out with water. Seek medical advice **immediately**.

OTHER: When assessing action take Risk & Safety Phrases into account (Section 15)

5. FIRE FIGHTING MEASURES.

EXTINGUISHING MEDIA RECOMMENDED: Use CO₂, Dry Powder or Foam type of Extinguishers, spraying extinguishing media to base of flames. Do not use direct water jet on burning material.

SPECIAL MEASURES : Avoid vapour inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.

EXTINGUISHING PROCEDURES: Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

6. ACCIDENTAL RELEASE MEASURES.

PERSONAL PRECAUTIONS: Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.

ENVIRONMENT PRECAUTIONS: Keep away from drains, soils, surface & groundwaters.

CLEANING UP METHODS FOR SPILLAGES: Remove all potential ignition sources. Contain spilled material. Cover with an inert or non-combustible inorganic absorbent material, or sweep up and remove to an approved disposal container. Observe state, federal & local disposal regulations.

7. HANDLING & STORAGE.

PRECAUTIONS IN HANDLING : Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

STORAGE CONDITIONS : Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light . Keep air contact to a minimum.

FIRE PROTECTION : Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION.

RESPIRATORY PROTECTION : Avoid breathing product vapour. Apply local ventilation where possible.

VENTILATION : Ensure good ventilation of working area.

HAND PROTECTION : Avoid all skin contact. Use chemically resistant gloves if required.

EYE PROTECTION : Use safety glasses.

WORK/HYGIENE PRACTICES : Wash hands with soap & water after handling.

9. PHYSICAL & CHEMICAL PROPERTIES.

COLOUR: Clear colourless to yellow

APPEARANCE : Clear mobile liquid

Odour: Spicy, earthy, myristic

FLAVOUR:

Flash-point °C: 57

RELATIVE DENSITY: d_{20}^{20} : 0.8850 to 0.9060

OPTICAL ROTATION @ 20°C: +5° to +15°

REFRACTIVE INDEX @ 20°C: 1.4750 to 1.4820

SOLUBILITY IN 85% ETHANOL @ 20°C: soluble 1 + 2 max

SOLUBILITY IN VEGETABLE OILS:

SOLUBILITY IN WATER: Negligible

ADDITIONAL DATA:

TYPICAL ANALYSIS BY GC/MS: 1,8-CINEOL <2.4% TYPICAL, TERPINEN-4-OL 38% TYPICAL

[ISO 4730: α -PINENE (1-6%), SABINENE (TR.-3.5%), α -TERPINENE (5-13%), LIMONENE (0.5-4%), P-CYMENE (0.5-12%), 1,8-CINEOL (0-15%), γ -TERPINENE (10-28%), TERPINOLENE (1.5-5%), TERPINEN-4-OL (30% +), α -TERPINEOL (1.5- 8%), AROMADENDRENE (TR-7%), LEDENE (VIRIDIFLORENE) (0.5-6.5%), δ -CADINENE (TR-8%) , GLOBULOL (TR-3%), VIRIDIFLOROL (TR-1.5%)]

10. STABILITY & REACTIVITY.

REACTIVITY : It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidising agents.

DECOMPOSITION : Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

11. TOXICOLOGICAL INFORMATION.

Found to be non-toxic, non-phototoxic, and non-irritating: see RIFM monograph (1988) *FCT*, **26**, 407 Special Issue VII. Ingestion: orl rat LD₅₀: 1.9-2.6ml/Kg ATTIA. However BEOA CHIP guidance (1997) gives hazard codes as R22 & R38.

12. ECOLOGICAL INFORMATION.

BIODEGRADABILITY : Data not available

PRECAUTIONS : Prevent surface contamination of soil, ground & surface water.

13. DISPOSAL CONSIDERATIONS.

Avoid disposing to drainage systems and into the environment. Seek expert advice.

14. TRANSPORT REGULATIONS. Flammable liquid

N.O.S. (Tea tree oil)

UN 1169

Packing Instr. 309

Dangerous goods class 3; Hazard Class 3.

15. REGULATORY INFORMATION. According to Directive 88/379/EEC

HAZARDS : Harmful

SYMBOLS : Xn

RISK PHRASES : R22, R38

SAFETY PHRASES :

16. OTHER INFORMATION.

Conc. % Limits:

PACKAGING:

Type	Suitability
Glass	Yes
Lacquer lined steel/tin	Moderate
Aluminium	Yes
HPPE	No
F/HDPE	Moderate
Other plastic	No

Stainless steel drums preferred.

SHELF-LIFE

Min 12 months when stored within advised conditions.

Q.C. REQUIREMENTS.

In-line with general product specification. Always satisfy suitability for specific application.

Retest after 6 months.

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