

# MATERIAL SAFETY DATA SHEET

## 1. IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY.

PRODUCT NAME: Tea Tree Oil

PRODUCT CODE: 30312

SUPPLIER: The Soap Kitchen, 11a South Street, Torrington, Devon, EX38 8AA

Emergency Tel No: 01805 622944 Emergency Contact: Mr. Richard Phillips.

## 2. COMPOSITION / INFORMATION ON INGREDIENTS.

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

H-No: 3301.29.6 CAS No: 85085-48-9 Status: natural

CoE No: 456 FEMA: 3902 Additives: none

FDA: IFRA: not restricted Application: Aromatherapy, pharmaceuticals, skincare etc

RIFM: monograph EINECS: 285-377-1 FCCIV: official

INCI name: Melaleuca alternifolia

## 3. HAZARDS IDENTIFICATION:

Xn. Harmful; R10 Flammable

## 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 CO<sub>2</sub>, 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:	Colourless to yellow
APPEARANCE:	Clear mobile liquid
ODOUR:	Spicy, earthy, myristic
FLASH POINT °C:	57
SPECIFIC GRAVITY @ 20°C:	0.885 - 0.906
OPTICAL ROTATION @ 20°C:	+5° to +15°
REFRACTIVE INDEX @ 20°C:	1.475 - 1.482
SOLUBILITY IN 85% ETHANOL @ 20°C:	soluble 1 + 2 max
SOLUBILITY IN WATER:	Negligible
TYPICAL ANALYSIS BY GC/MS:	1,8-CINEOL <2.4% TYPICAL, TERPINEN-4-OL 38% TYPICAL
ISO 4730:	$\alpha$ -PINENE (1-6%), SABINENE (TR.-3.5%), $\alpha$ -TERPINENE (5-13%), LIMONENE (0.5-4%), PCYMENE (0.5-12%), 1,8-CINEOL (0-15%), $\gamma$ -TERPINENE (10-28%), TERPINOLENE (1.55%), TERPINEN-4-OL (30% +), $\alpha$ -TERPINEOL (1.5- 8%), AROMADENDRENE (TR-7%), LEDENE (VIRIDIFLORENE) (0.5-6.5%), $\delta$ -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 LD<sub>50</sub>: 1.9-2.6ml/Kg ATTIA. However BEOA CHIP guidance (1997) gives hazard codes as R22 & R38 (some evidence of skin irritation above 75%) concentration.

## 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

Packing Instr. 309

Road (ADR/RID): Class 3 item 31/c RID No 301; ADR RN N/2301

AIR (IATA): Class 3 packing group III

SEA (IMDG): page 3142, Class 3

CHIP: See section 15

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

HAZARDS: Harmful

SYMBOLS: Xn

RISK PHRASES: R10 Flammable Liquid  
R22 Harmful if swallowed  
R38 Irritating to skin

R65 May cause lung damage if swallowed

SAFETY PHRASES: S16 Keep away from sources of ignition – No Smoking

S62 If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or label

#### 16. OTHER INFORMATION.

UN 1169: applies

Cosmetics Directive 7<sup>th</sup> Amendment: Restrictions may apply. A source of Limonene, listed as a sensitiser. Check maximum usage levels for skin care products.

#### PACKAGING:

Type	Suitability
Glass	Yes
Lacquer lined steel/tin	Moderate
Aluminium	Yes
HPPE	Yes
F/HDPE	Yes
Other plastic	Yes

Stainless steel drums preferred.

#### SHELF LIFE

When stored within advised conditions, re-test after 12 months, then at 3 monthly intervals up to a maximum life of 36 months.

#### Q.C. REQUIREMENTS.

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

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