

AKÖMA™

FROM THE HEART

MATERIAL SAFETY DATA SHEET

1 - Identification of Product and Supplier

Product Name: **Tea Tree Essential Oil**
Supplier: **Akoma International (UK) LTD**
Unit 9A Sawley Park
Nottingham Road
Derby
DE21 6AS
Tel: +44 (0) 1332 613 967
Emergency Contact: Mr. Wynn Mensah – Tel: 01332 613 967

2 - Composition and information on ingredients:

INCI name: **Melaleuca Alternifolia (Tea Tree) Leaf Oil**
Definition/Botanical Origin: Melaleuca Alternifolia Oil is the oil distilled from the leaves and twigs of the tea tree, *Melaleuca alternifolia* L., Myrtaceae.

<u>H-No:</u>	3301.29.6	<u>CAS No:</u>	85085-48-9 / 8022-72-8 / 68647-73-4
<u>Status:</u>	Natural	<u>CoE No:</u>	456
<u>FEMA:</u>	3902	<u>Additives:</u>	None
<u>FDA:</u>		<u>IFRA:</u>	Not restricted
<u>EC No:</u>	285-377-1 / - / -	<u>FCCIV:</u>	Official
<u>EINECS No:</u>	85085-48-9	<u>Applications:</u>	Aromatherapy, pharmaceuticals, skin care, etc.

3 - Hazards identification:

Xn - Harmful; N - Dangerous for the environment; 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 minutes. 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: Do not induce vomiting. 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:

<u>Extinguishing media</u>	Use CO ₂ , Dry Powder or Foam type Extinguishers, spraying recommended: extinguishing media to base of flames. Do not use direct water jet on burning material.
<u>Special measures:</u>	Avoid vapour inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.
<u>Extinguishing procedures:</u>	Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

6 - Accidental release measures:

<u>Personal precautions:</u>	Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.
<u>Environment precautions:</u>	Keep away from drains, soils, surface & ground waters.
<u>Cleaning up methods</u>	Remove all potential ignition sources. Contain spilled material.
<u>Cover for spillages:</u>	With an inert or non-combustible inorganic absorbent material, sweep up and remove to an approved disposal container. Observe state, federal & local disposal regulations.

7 - Handling and storage:

<u>Precautions in handling:</u>	Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.
<u>Storage conditions:</u>	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.
<u>Fire protection:</u>	Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

8 - Exposure controls and personal protection:

<u>Respiratory protection:</u>	Avoid breathing product vapour, wear self-contained breathing apparatus. Apply local ventilation where possible.
<u>Ventilation:</u>	Ensure good ventilation of working area.
<u>Hand protection:</u>	Avoid all skin contact. Use chemically resistant gloves if required.
<u>Eye protection:</u>	Use safety glasses.
<u>Work/Hygiene practices:</u>	Wash hands with soap & water after handling.

9 - Physical data and chemical properties:

<u>Colour:</u>	Colourless to pale yellow
<u>Appearance:</u>	Clear mobile liquid
<u>Odour:</u>	Spicy, earthy, myristic
<u>Flash Point (°)C:</u>	57
<u>Specific Gravity @ 20°C:</u>	0.885 - 0.906
<u>Optical Rotation @ 20°C:</u>	+5° to +15°
<u>Refractive Index @ 20°C:</u>	1.475 - 1.482

Solubility In 85% Ethanol @ 20°C: Soluble 1 + 2 max

Solubility In Water: Negligible

GC Analysis: 1,8-Cineol (tr -15%) , Terpinen-4-ol (30 - 48%) a-Pinene (1-6%), Sabinene (tr- 3.5%), a-Terpinene (5-13%), Limonene (0.5-1.5%), p-Cymene (0.5-8.0%), 1,8-Cineol (Tr-15%), g-Terpinene (10-28%), Terpinolene (1.5 - 5.0%), a-Terpineol (1.5- 8%), Aromadendrene (tr-3%), Ledene (tr - 3%), d-Cadinene (tr-3%) , Globulol (tr-1%), Viridiflorol (tr-1.0%).

10 - Stability and 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 (some evidence of skin irritation above 75%) concentration.

12 - Ecological information:

Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment

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 information:

UN 1169: Applies

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:

Hazards: Harmful, Dangerous to the environment

Symbols: Xn, N

Risk Phrases: R10 Flammable

R22 Harmful if swallowed

R38 Irritating to skin

R43 May cause sensitisation by skin contact

R51/53 Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed

Safety Phrases: S24 Avoid contact with skin

S37 Wear suitable gloves

S61 Avoid release to the environment. Refer to special instructions / safety data sheets

S62 If swallowed, do not induce vomiting: seek medical advice immediately

16 - Other information:

Cosmetics Directive 7th 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	No

SHELF LIFE

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

Q.C. REQUIREMENTS

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

The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is supplied without warranty, expressed or implied, regarding it's' correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product, and to assume liability for loss, injury, damage or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification, or for any given application, and buyers should seek to verify their requirements and product use.