Material Safety Data Sheet

TEA TREE ESSENTIAL OIL

Safety Data Sheet dated 23/11/2016, version 2

SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier
   Identification of the substance:
   Trade name: TEA TREE OIL
   CAS number: 85085-48-9
   EC number: 285-377-1
   The transition time according to REACH Regulation, Article 23 is still not expired.
1.2. Relevant identified uses of the substance or mixture and uses advised against
   Recommended use:
   Raw material for chemicals, cosmetic, pharmaceutical industry
   Industrial uses
1.3. Details of the supplier of the safety data sheet
   Company:
   SC Herodio Crafts SRL
   Business address: Str Pravat nr 14 bl P7 ap 124 sector 6 Bucuresti.
   Warehouse: str Topaz nr 2 Bragadiru Ilfov.
   Tel/fax 0733970868/0372874712.
   www.aroma-shop.ro. office@aroma-shop.ro
1.4. Emergency telephone number
   0040 21 3183606 -INSPB

SECTION 2: Hazards identification
2.1. Classification of the substance or mixture
   EC regulation criteria 1272/2008 (CLP)
   Warning, Flam. Liq. 3, Flammable liquid and vapour.
   Warning, Acute Tox. 4, Harmful if swallowed.
   Warning, Skin Irrit. 2, Causes skin irritation.
   Warning, Eye Irrit. 2, Causes serious eye irritation.
   Warning, Skin Sens. 1, May cause an allergic skin reaction.
   Warning, STOT SE 3, May cause respiratory irritation.
   Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:
   No other hazards
2.2. Label elements
   Symbols:
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Warning
Hazard statements:
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H335 May cause respiratory irritation.
- H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P370+P378 In case of fire: Use ... to extinguish.

Special Provisions:
- None

Contents
- TERPINEN-4-OL
- GAMMA TERPINENE
- ALFA TERPINENE
- EUCAPIPTOLO

Special provisions according to Annex XVII of REACH and subsequent amendments:
- None

2.3. Other hazards
- vPvB Substances: None
- PBT Substances: None
- Other Hazards:
  - No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
- N.A.

3.2. Mixtures
- Hazardous components within the meaning of the CLP regulation and related classification:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Name</th>
<th>Ident. Number</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;= 30% - &lt; 40%</td>
<td>TERPINEN-4-OL</td>
<td>CAS: 562-74-3 EC: 520-235-5</td>
<td>3.1/4/Oral Acute Tox. 4 H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.2/2 Skin Irrit. 2 H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.3/2 Eye Irrit. 2 H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.8/3 STOT SE 3 H335</td>
</tr>
<tr>
<td>&gt;= 20% - &lt; 30%</td>
<td>1-Isopropyl-4-methyl-1,4-cyclohexadiene</td>
<td>CAS: 99-85-4 EC: 202-794-6</td>
<td>2.6/3 Flam. Liq. 3 H226</td>
</tr>
<tr>
<td></td>
<td>p-Mentha-1,4-diene</td>
<td></td>
<td>3.2/2 Skin Irrit. 2 H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.3/2 Eye Irrit. 2 H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.8/3 STOT SE 3 H335</td>
</tr>
<tr>
<td>&gt;= 7.5% - &lt; 10%</td>
<td>ALFA TERPINENE</td>
<td>CAS: 99-86-5 EC: 202-795-1</td>
<td>2.6/3 Flam. Liq. 3 H226</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.2/2 Skin Irrit. 2 H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.3/2 Eye Irrit. 2 H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3.8/3 STOT SE 3 H335</td>
</tr>
</tbody>
</table>
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| >= 5% - < 7.5% | para CYMENE       | CAS: 99-87-6 | EC: 202-796-7 | 3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/3 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H335 4.1/C2 Aquatic Chronic 2 H411 |
| >= 3% - < 5%   | EUCALYPTOL       | CAS: 470-82-6 | EC: 207-431-5 | REACH No.: 01-2119677 | 2-24 3.6/3 Flam. Liq. 3 H226 3.2/2 Skin Irrit. 2 H315 3.3/3 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H335 4.1/C2 Aquatic Chronic 2 H411 |
| >= 3% - < 5%   | ALPHA-TERpineol  | CAS: 98-55-5 | EC: 202-680-6 | 3.2/2 Skin Irrit. 2 H315 3.3/3 Eye Irrit. 2 H319 |
| >= 1% - < 3%   | ALPHA PINENE     | CAS: 80-56-8 | EC: 201-291-9 | 3.2/2 Skin Irrit. 2 H315 3.4/2/1-1A-1B Skin Sens. 1.1A,1B H317 |
| >= 1% - < 3%   | (R)-p-MENTHA-1,8-DIENE | Index number: 601-029-00-7 | CAS: 5989-27-5 | EC: 227-813-5 | REACH No.: 01-21195292 | 23-47-xxxx 3.6/3 Flam. Liq. 3 H226 3.10/1 Asp. Tox. 1 H304 3.2/2 Skin Irrit. 2 H315 3.4/2/1 Skin Sens. 1 H317 4.1/A1 Aquatic Acute 1 H400 4.1/C1 Aquatic Chronic 1 H410 |
| >= 0.5% - < 1% | BETA PINENE      | CAS: 127-91-3 | EC: 204-872-5 | 3.10/1 Asp. Tox. 1 H304 3.2/2 Skin Irrit. 2 H315 3.4/2/1-1A-1B Skin Sens. 1.1A,1B H317 |

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**SECTION 4: First aid measures**

4.1. Description of first aid measures

In case of skin contact:
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Immediately take off all contaminated clothing.
Areas of the body that have - or are only even suspected of having - come into contact with
the product must be rinsed immediately with plenty of running water and possibly with soap.
Wash thoroughly the body (shower or bath).
Remove contaminated clothing immediately and dispose off safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of
time, then consult an ophthalmologist immediately.
Protect uninjured eye.

In case of Ingestion:
Give nothing to eat or drink.

In case of Inhalation:
In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed
None

4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or unwellness, seek medical advice immediately (show directions for use
or safety data sheet if possible).

Treatment:
None

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Extinguishing media which must not be used for safety reasons:
None in particular.

5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.

5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into
drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove all sources of ignition.
Wear breathing apparatus if exposed to vapours/dusts/aerosols.
Provide adequate ventilation.
Use appropriate respiratory protection.
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible
authorities.
Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up
Wash with plenty of water.

6.4. Reference to other sections
See also section 8 and 13
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SECTION 7: Handling and storage
7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Use localized ventilation system.
Don't use empty container before they have been cleaned.
Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
Contaminated clothing should be changed before entering eating areas.
Don't eat or drink while working.
See also section 8 for recommended protective equipment.
7.2. Conditions for safe storage, including any incompatibilities
Keep out from light sun
Keep the product in dry and cool place
Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.
7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
ALPHA-TERPINEOL - CAS: 98-55-5
   TLV TWA - n.a.
   TLV STEL - n.a.
ALPHA PINENE - CAS: 80-56-8
   ACGIH - LTE(8h): 20 ppm - Notes: DSEN, A4 - Lung irr
   BETA PINENE - CAS: 127-91-3
   ACGIH - LTE(8h): 20 ppm - Notes: DSEN, A4 - Lung irr
DNEL Exposure Limit Values
   N.A.
PNEC Exposure Limit Values
   N.A.
8.2. Exposure controls
Eye protection:
   Eye glasses with side protection.
Protection for skin:
   Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Protection for hands:
   CR (polychloroprene, chloroprene rubber).
Respiratory protection:
   Use respiratory protection where ventilation is insufficient or exposure is prolonged.
Thermal Hazards:
   None
Environmental exposure controls:
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Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Value</th>
<th>Method:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance and colour:</td>
<td>liquid clear</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Odour:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>pH:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Melting point / freezing point:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Flash point:</td>
<td>40 ° C</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solid/gas flammability:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vapour pressure:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Vapour density:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Relative density:</td>
<td>0.885 - 0.906</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>insoluble</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Solubility in oil:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Explosive properties:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Oxidizing properties:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

9.2. Other information

<table>
<thead>
<tr>
<th>Properties</th>
<th>Value</th>
<th>Method:</th>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscibility:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Fat Solubility:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Conductivity:</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Substance Groups relevant properties</td>
<td>N.A.</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

SECTION 10: Stability and reactivity
10.1. Reactivity
Stable under normal conditions
10.2. Chemical stability
Stable under normal conditions
10.3. Possibility of hazardous reactions
None
10.4. Conditions to avoid
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Stable under normal conditions.

10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:
MELALEUCA ESS. OIL - TEA TREE OIL - CAS: 85085-48-9
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat = 1900 mg/kg
   Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Toxicological information of the main substances found in the mixture:
1-Isopropyl-4-methyl-1,4-cyclohexadiene p-Mentha-1,4-diene - CAS: 99-85-4
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat = 3650 mg/kg
ALFA TERPINENE - CAS: 99-86-5
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat = 1680 mg/kg
EUCALYPTOL - CAS: 470-82-6
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat = 2480 mg/kg - Source: Food Cosmetic Technology 13 (1), 105, 1975
ALPHA PINENE - CAS: 80-56-8
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat = 3700 mg/kg
   Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg
(R)-p-MENTHA-1,8-DIENE - CAS: 5989-27-5
a) acute toxicity:
   Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg
ALPHA-TERPINEOL - CAS: 98-55-5
DL50 orale, ratto 4300 mg/kg

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:
   a) acute toxicity;
   b) skin corrosion/irritation;
   c) serious eye damage/irritation;
   d) respiratory or skin sensitisation;
   e) germ cell mutagenicity;
   f) carcinogenicity;
   g) reproductive toxicity;
   h) STOT-single exposure;
   i) STOT-repeated exposure;
   j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.
ALPHA PINENE - CAS: 80-56-8
a) Aquatic acute toxicity:
   Endpoint: LC50 = 0.28 mg/l - Duration h: 96
(R)-p-MENTHA-1,8-DIENE - CAS: 5989-27-5
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a) Aquatic acute toxicity:
   Endpoint: EC50 = 0.36 mg/l - Duration h: 48 - Notes: Daphnia magna

12.2. Persistence and degradability
   N.A.

12.3. Bioaccumulative potential
   N.A.

12.4. Mobility in soil
   N.A.

12.5. Results of PBT and vPvB assessment
   vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
   None

SECTION 13: Disposal considerations
13.1. Waste treatment methods
   Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information
14.1. UN number
   ADR-UN number: 1169
   IATA-Un number: 1169
   IMDG-Un number: 1169

14.2. UN proper shipping name

14.3. Transport hazard class(es)
   ADR-Class: 3
   IATA-Class: 3
   IMDG-Class: 3

14.4. Packing group
   ADR-Packing Group: III
   IATA-Packing group: III
   IMDG-Packing group: III

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
   N.A.

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
   Dir. 98/24/EC (Risks related to chemical agents at work)
   Dir. 2000/39/EC (Occupational exposure limit values)
   Regulation (EC) n. 1907/2006 (REACH)
   Regulation (EC) n. 1272/2008 (CLP)
   Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
   Regulation (EU) n. 453/2010 (Annex II)
   Regulation (EU) n. 286/2011 (ATP 2 CLP)
   Regulation (EU) n. 618/2012 (ATP 3 CLP)
   Regulation (EU) n. 487/2013 (ATP 4 CLP)
   Regulation (EU) n. 944/2013 (ATP 5 CLP)
   Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
   None

Where applicable, refer to the following regulatory provisions:
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1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):
N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of phrases referred to in Section 3:
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H226 Flammable liquid and vapour.
H411 Toxic to aquatic life with long lasting effects.
H335 H335.1
H317 May cause an allergic skin reaction.
H304 May be fatal if swallowed and enters airways.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:
ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX’s DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It
refers solely to the product indicated and constitutes no guarantee of particular quality.
It is the duty of the user to ensure that this information is appropriate and complete with respect to
the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.
CAS: Chemical Abstracts Service (division of the American Chemical
Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of
Chemicals.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport
Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"
(ICAO).
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INCI: International Nomenclature of Cosmetic Ingredients.
KSI: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LTE: Long-term exposure.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE: Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.
(ACGIH Standard).
WGK: German Water Hazard Class.