

Tea Tree Essential Oil SDS

Version: 1.0 Version Date: 28/04/2024

# **Safety Data Sheet**

In accordance with REACH Regulation EC No.1907/2006

# Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

**Product name:** Tea Tree Essential Oil

**CAS number:** 85085-48-9 / 68647-73-4 / 8022-72-8

EINECS number: 285-377-1

Synonyms: Tea Tree Oil

INCI name: Melaleuca Alternifolia Leaf Oil

# 1.2. Details of the supplier of the safety data sheet

Company name: Bath and Body Base Ltd

2A Laurel Way Bishop Auckland Co. Durham DL14 7NF

**Tel:** 07493 064263

Email: technical@bathandbodybase.com

# 1.3. Emergency telephone number

**Emergency tel:** 07493 064263

# Section 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification (67/548/EEC): No additional data available.

Classification Aspiration Hazard Category 1 - H304 (EU1272/2008): Acute Toxicity - Oral Category 4 - H302 Skin Corrosion/Irritation Category 2 - H315

Serious Eye Damage/Eye Irritation Category 2 - H319

Skin Sensitization Category 1B - H317 Reproductive Toxicity Category 2 - H361

Specific Target Organ Toxicity (Single Exposure) Category 3 - H336

Chronic Aquatic Toxicity Category 2 - H411 Flammable Liquids Category 3 - H226

#### 2.2. Label elements

#### Label in accordance with regulation (EC) no 1272/2008.

Hazard statements: H302 - Harmful if swallowed.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

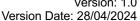
H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

H361 - Suspected of damaging fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.

H226 - Flammable liquid and vapor.

EUH208 - Contains Cymene Para, Terpinolene, d-Limonene,

Eucalyptol, Pinene Beta may produce an allergic reaction.





Danger Signal words:

Contains: Terpinen-4-ol, gamma-Terpinene, alpha-Terpinene, alpha-Pinene

Hazard pictograms:



**Precautionary statements:** 

P210 - Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P370+P378 - In case of fire: use dry chemical, Co2, water spray or alcohol-resistant foam to extinguish.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves/protective clothing/eye protection/face

protection. P301+P310 - If swallowed, immediately call a poison centre or doctor/physician.

P331 - Do not induce vomiting.

P302+P352 - If on skin, wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs, get medical advice/attention.

P305+P351+P338 - If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

P337+P313 - If eye irritation persists, get medical advice/attention.

P304+P340 - If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P263 - Avoid contact during pregnancy/while nursing.

P308+P313 - If exposed or concerned, get medical advice/attention.

P273 - Avoid release to the environment.

P501 - Dispose of contents/container in accordance with local, regional,

national, and international regulations as applicable.

Other hazards: H401 - Toxic to aquatic life.

#### 2.3. Other hazards

Adverse physio-chemical

properties:

No data.

Adverse effects on human

health:

No data.

PBT or vPvB according to

annex XIII:

No data.

### Section 3: Composition/information on ingredients

#### 3.1. **Substances**

Substances: 40 - <50% Terpinen-4-ol

CAS No.: 562-74-3, EC No.: 209-235-5

Classification (EC 1272/2008) Flam. Lig. 4 (H227), Acute Tox. 4 (H302), Acute Tox. 5 (H313), Skin Irrit. 2 (H315), Eye Irrit. 2B (H320), Acute Tox.

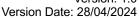
4 (H332), STOT SE 3 (H336), Aquatic Acute

20 - <30% gamma-Terpinene (p-Mentha-1,4-diene)

CAS No.: 99-85-4, EC No.: 202-794-6

Classification (EC 1272/2008) Repr. 2 (H361), Flam. Liq. 3 (H226), Asp. Tox. 1 (H304), Acute Tox. 5 (H303), Aquatic Acute 2 (H401), Aquatic

Chronic 2 (H411)





#### 10 - <20% alpha-Terpinene

CAS No.: 99-86-5, EC No.: 202-795-1

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Acute Tox. 4 (H302), Asp. Tox. 1 (H304), Skin Irrit. 3 (H316), Skin Sens. 1 (H317), Aquatic Acute 2 (H401), Aquatic Chronic 2 (H411)

#### 1 - <10% alpha-Terpineol

CAS No.: 98-55-5

Classification (EC 1272/2008) Flam. Liq. 4 (H227), Acute Tox. 5 (H303), Skin Irrit. 2 (H315), Eye Irrit. 2A (H319), Aquatic Acute 2 (H401)

### 1 - <10% alpha-Pinene

CAS No.: 80-56-8

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Acute Tox. 4 (H302), Skin Irrit. 2 (H315), Skin Sens. 1B (H317), Asp. Tox. 1 (H304), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)

#### 1 - <10% d-Limonene

CAS No.: 5989-27-5

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Skin Irrit. 2 (H315), Skin Sens. 1B (H317), Asp. Tox. 1 (H304), Aquatic Acute 1 (H400), Aquatic Chronic 3 (H412)

## 1 - <10% Terpinolene

CAS No.: 586-62-9

Classification (EC 1272/2008) Flam. Liq. 4 (H227), Acute Tox. 5 (H303), Asp. Tox. 1 (H304), Skin Irrit. 3 (H316), Skin Sens. 1B (H317), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)

# 1 - <10% para-Cymene

CAS No.: 99-87-6

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Asp. Tox. 1 (H304), Skin Irrit. 2 (H315) Eye Irrit. 2A (H319), Acute Tox. 3 (H331), STOT SE 3 (H335), Repr. 2 (H361), Aquatic Chronic 2 (H411)

# 1 - <10% Eucalyptol

CAS No.: 470-82-6

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Acute Tox. 5 (H303), Skin Sens. 1B (H317), Eye Irrit. 2B (H320), Aquatic Acute 3 (H402)

## 0.1 - <1% beta-Pinene

CAS No.: 127-91-3

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Skin Irrit. 2 (H315), Skin Sens. 1B (H317), Asp. Tox. 1 (H304), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)

# 0.1 - <1% alpha-Phellandrene

CAS No.: 99-83-2

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Asp. Tox. 1 (H304), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410)

#### 0.01 - <1% Myrcene

CAS No.: 123-35-3

Classification (EC 1272/2008) Flam. Liq. 3 (H226), Skin Irrit. 2 (H315), Eye Irrit. 2A (H319), Asp. Tox. 1 (H304), Aquatic Acute 1 (H400), Aquatic Chronic 2 (H411)



Tea Tree Essential Oil SDS Version: 1.0

Version Date: 28/04/2024

### Section 4: First aid measures

### 4.1. Description of first aid measures

**General advice:** Always remove contaminated clothing immediately.

**Skin contact:** Remove contaminated clothing and shoes. Wash off immediately with

soap and plenty of water. Wash contaminated clothing before reuse.

Consult a physician if necessary.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at

least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/ attention.

Ingestion: Rinse mouth. Drink 1 or 2 glasses of water. Call a physician or poison

control centre immediately. Do not induce vomiting.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If

symptoms persist, call a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects: Redness/rash on skin. Drowsiness. Dizziness.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Immediate/special

treatment:

Treat symptomatically.

### Section 5: Fire-fighting measures

# 5.1. Extinguishing media

Suitable extinguishing

media:

Use dry chemical carbon dioxide (Co2) water spray (fog) alcohol

resistant foam.

Unsuitable extinguishing

media:

Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Special hazards: Flammable keep product and empty container away from heat and

sources of ignition risk of ignition.

**Hazardous combustion** 

products:

Irritating or toxic substances may be emitted upon burning, combustion

or decomposition.

# 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus and protective suit. Use

personal protective equipment as required.

Tea Tree Essential Oil SDS Version: 1.0

Version Date: 28/04/2024

### Section 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Evacuate personnel to safe areas. Use personal protective equipment

as required, see Section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapours or mists.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains, water courses or onto the ground. Dispose

of in line with local authority guidelines.

6.3. Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk. Do not touch or walk through

spilled material. A vapour suppressing foam may be used to reduce vapours. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later

disposal.

Methods for cleaning up: Cover liquid spill with sand, earth or other non-combustible absorbent

material. Sweep up and shovel into suitable containers for disposal. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Take precautionary measures against

static discharges.

Prevention of secondary

hazards:

Clean contaminated objects and areas thoroughly observing

environmental regulations.

6.4. Reference to other sections

**Reference to other sections:** Refer and consider Section 8 and 13.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Handle in accordance with good hygiene and safety practice. Keep

away from heat, sparks, open flames and hot surfaces - no smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage: Keep away from heat, sparks, flame and other sources of ignition (i.e.,

pilot lights, electric motors and static electricity). Protect from direct sunlight. Keep container tightly closed in a dry and well-ventilated place. Keep containers tightly closed in a cool, well-ventilated place. Keep

away from heat. Keep in properly labelled containers.

7.3. Specific end use(s)

Specific end use(s): No data.



## Section 8: Exposure controls/personal protection

# 8.1. Control parameters

Control parameters: -

### 8.2. Exposure controls



**Eye protection:** Wear protective gloves/eye protection/face protection. **Hand protection:** Wear protective gloves/eye protection/face protection.

Respiratory equipment: Under normal conditions of use and where adequate ventilation is

available to prevent build-up of excessive vapour, this material should not require special engineering controls. However, in conditions of high or prolonged use, or high temperature or other conditions which increase exposure, the following engineering controls can be used to

minimise exposure to personnel:

A) Increase ventilation of the area with local exhaust ventilation.

B) Personnel can use an approved, appropriately fitted respirator with

organic vapour cartridge or canisters and particulate filters.

C) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

Hygiene measures: Good personal hygiene practices are always advisable, especially

when working with chemicals/oils. Do not eat, drink or smoke when using this product. Contaminated work. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and

eye/face protection. Avoid contact with skin, eyes or clothing.

**Engineering measures:** Provide adequate ventilation.

**Skin protection:** Wear protective clothing to reduce the risk of skin and eye contact.

**Personal protection:** Avoid inhalation of the product. Avoid contact with skin and eyes.

Other protection: Wear suitable protection to avoid contact with skin and eyes. Do not

inhale vapours.

**Process conditions:** Ensure area is well ventilated. Avoid vapour inhalation. Safety shower

and eye bath.

**Environmental exposure** 

controls:

Avoid discharging into drainage water. Only eliminate by authorised

companies.

#### Section 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Appearance: Liquid

Colourless to pale yellow

Odour: Characteristic

**Relative density:** 0.882 – 0.903 @ 20°C

Flashpoint (°C): 56°C



Tea Tree Essential Oil SDS Version: 1.0

Version Date: 28/04/2024

Solubility in water @ 20°C: No data.

9.2. Other information

Other information: VOC content 9.721

Information with regard to physical hazard classes:

No data.

Other safety characteristics: No data.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data.

10.2. Chemical stability

Chemical stability: Stable under suggested storage conditions.

Explosion data: Sensitivity to mechanical impact: none.

Sensitivity to static discharge: yes.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions:

None under normal processing.

10.4. Conditions to avoid

Conditions to avoid: Extremes of temperature and direct sunlight. Heat, flames and sparks.

Keep out of reach of children.

10.5. Incompatible materials

Materials to avoid: Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition product

Haz. decomp. products: None known based on information supplied.



Version Date: 28/04/2024

# **Section 11: Toxicological information**

# 11.1. Information on toxicological effects

Acute toxicity:

Unknown acute toxicity

94.53% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
56.587% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Oral LD50 1,900 mg/kg Component Information

Terpineol alpha	Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2 Rat > 2000 mg/kg Male 2 (reliable with restrictions) 1 Mouse 2830 mg/kg Male 2 (reliable with restrictions) 2 Rat 4300 mg/kg Male 2 (reliable with restrictions) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) Cymene para 1 +/- Rat 4750 mg/kg 2 (reliable with restrictions) Terpinolene 1 Rat 4.39 ml/kg 2 (reliable with restrictions) 1 mouse 5600 mg/kg female 4 (not assignable) 2 Mouse 6600 mg/kg Female 4 (not assignable) 3 Rat 4400 mg/kg Male 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 5 Rat 5200 mg/kg Female 4 (not assignable) 6 Rat > 2000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 9 Rat > 5000 mg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 9 Rat > 5000 mg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable with restrictions) 3 Rat 4.5 pg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable with restrictions) 1 Rat 4.3 g/kg Female, Male 2 (reliable with restrictions) 1 Rat 4.3 g/kg Female, Male 2 (reliable with restrictions) 1 Rat 4.3 g/kg Male 4 (not assignable) 1 Rat 3.700 mg/kg Male 2 (reliable with restrictions) 1 Rat 3.700 mg/kg Male 2 (reliable with restrictions) 2 Rat 3.814 800 mg/kg Male 2 (reliable with restrictions) 1 Rat 3.700 mg/kg Male 4 (not assignable) 1 Rat 3.7000 mg/kg Male 4 (not assignable) 1 Rat 3.7000 mg/kg Male 4 (not assignable) 1	Terpineol alpha	1 Rat > 2000 mg/kg Female,	Δ.	
2 Rat > 2000 mg/kg Male 2 (reliable with restrictions) 1 Mouse 2830 mg/kg Male 2 (reliable with restrictions) 2 Rat 4300 mg/kg Male 2 (reliable with restrictions) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) Cymene para 1 +/- Rat 4750 mg/kg 2 (reliable with restrictions) Terpinolene 1 Rat 4.39 ml/kg 2 (reliable with restrictions) 1 mouse 5600 mg/kg female 4 (not assignable) 2 Mouse 6600 mg/kg Female 4 (not assignable) 3 Rat 4400 mg/kg Male 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 5 Rat 5200 mg/kg Female 4 (not assignable) 6 Rat > 2000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 9 Rat > 5000 mg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 9 Rat > 5000 mg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable with restrictions) 3 Rat 4.5 pg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female 1 (reliable with restrictions) 1 Rat 4.3 g/kg Female, Male 2 (reliable with restrictions) 1 Rat 4.3 g/kg Female, Male 2 (reliable with restrictions) 1 Rat 4.3 g/kg Male 4 (not assignable) 1 Rat 3.700 mg/kg Male 2 (reliable with restrictions) 1 Rat 3.700 mg/kg Male 2 (reliable with restrictions) 2 Rat 3.814 800 mg/kg Male 2 (reliable with restrictions) 1 Rat 3.700 mg/kg Male 4 (not assignable) 1 Rat 3.7000 mg/kg Male 4 (not assignable) 1 Rat 3.7000 mg/kg Male 4 (not assignable) 1		Male 2 (reliable with restrictions)		
(reliable with restrictions)  1 Mouse 2830 mg/kg Male 2 (reliable with restrictions)  2 Rat 4300 mg/kg Male 2 (reliable with restrictions)  2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  1 Rat 370 mg/kg Male 4 (not assignable)  Terpinolene  1 Rat 4.3 mr/kg 2 (reliable with restrictions)  1 mouse 5600 mg/kg Male 4 (not assignable)  2 Mouse 6600 mg/kg Male 4 (not assignable)  2 Mouse 6600 mg/kg Female 4 (not assignable)  3 Rat 4400 mg/kg Male 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5000 mg/kg Female 4 (not assignable)  6 Rat > 2000 mg/kg Female 4 (not assignable)  7 Rat 5000 mg/kg Male 4 (not assignable)  8 Rat 5000 mg/kg Male 4 (not assignable)  1 Rat 2480 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg 4 (not assignable)  1 Rat 2480 mg/kg Female 1 (reliable without restrictions)  3 Rat 4.5 g/kg Female 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 3.3 mg/kg Male 4 (not assignable)  1 Rat 3.3 mg/kg Male 4 (not assignable)  1 Rat 3.3 mg/kg Male 4 (not assignable)  1 Rat 3.4 5 g/kg Female, Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 3.3 mg/kg Male 4 (not assignable)  1 Rat 3.3 mg/kg Male 4 (not assignable)  3 Rat 4.5 mg/kg Male 2 (reliable with restrictions)  4 Rat 3.4 mg/kg Male 2 (reliable with restrictions)  3 Rat 4.5 mg/kg Male 2 (reliable with restrictions)  3 Rat 4.5 mg/kg Male 2 (reliable with restrictions)			I	
1 Mouse 2830 mg/kg Male 2 (reliable with restrictions)			I	
(reliable with restrictions)  2 Rat 3956 mg/kg Male 2 (reliable with restrictions)  Pinene alpha  2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  4 Rat 5700 mg/kg 4 (not assignable)  4 Rat 5500 mg/kg 2 (reliable with restrictions)  Terpinolene  1 Rat 4370 mg/kg V (reliable with restrictions)  Limonene D  1 Mouse 5600 mg/kg 4 (not assignable)  2 Mouse 6600 mg/kg Male 4 (not assignable)  3 Rat 4400 mg/kg Male 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Male 4 (not assignable)  6 Rat > 2000 mg/kg Female 1 (reliable with restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Male 4 (not assignable)  1 Rat 2480 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Male 4 (not assignable)  1 Rat 2480 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Male 4 (not assignable)  1 Rat 2480 mg/kg Female 2 (reliable with restrictions)  3 Rat 4 5 g/kg Female 2 (reliable with restrictions)  4 Rat 4 7 g/kg Male 2 (reliable with restrictions)  4 Rat 4 7 g/kg Male 2 (reliable with restrictions)  4 Rat 4 7 g/kg Male 2 (reliable with restrictions)  4 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat 5 g/kg Female, Male 2 (reliable with restrictions)  4 Rat 4 7 g/kg Male 2 (reliable with restrictions)  4 Rat 4 7 g/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)			I	
Pinene alpha   2 Rat 3956 mg/kg Male 4 (not assignable)   3 Rat 4800 mg/kg Male 4 (not assignable)   1 Rat 3700 mg/kg Male 4 (not assignable)   4 Rat > 5000 mg/kg 4 (not assignable)   4 Rat > 5000 mg/kg 4 (not assignable)   7 Ret 4750 mg/kg 4 (reliable with restrictions)   7 Ret 4750 mg/kg 4 (reliable with restrictions)   8 Ret 4 (not assignable)   9 Ret 4 (not assignable)   1 Rat 430 mg/kg Male 4 (not assignable)   3 Rat 4400 mg/kg Male 4 (not assignable)   1 Rat 5200 mg/kg Female 4 (not assignable)   1 Rat 5200 mg/kg Female 4 (not assignable)   1 Rat 5200 mg/kg Female 1 (reliable without restriction)   7 Rat > 5000 mg/kg 4 (not assignable)   8 Rat > 5000 mg/kg 4 (not assignable)   8 Rat > 5000 mg/kg 4 (not assignable)   2 Rat 4.3 g/kg Female 2 (reliable with restrictions)   3 Rat 4.5 g/kg Female 2 (reliable with restrictions)   3 Rat 4.5 g/kg Female 2 (reliable with restrictions)   3 Rat 4.5 g/kg Female 4 (not assignable)   2 Rat 4.7 g/kg Male 2 (reliable with restrictions)   4 Rat 7.8 g/kg Male 2 (reliable with restrictions)   4 Rat 7.8 g/kg Male 2 (reliable with restrictions)   4 Rat 7.8 g/kg Male 2 (reliable with restrictions)   4 Rat 7.8 g/kg Male 2 (reliable with restrictions)   4 Rat 7.8 g/kg Male 4 (not assignable)   4 Rat 5.8 g/kg Male 4 (not assignable)   6 Rat 7.8 g/kg Male 4 (not assignable)   6 Rat 7.8 g/kg Male 4 (not assignable)   7 Rat 3700 mg/kg Male 2 (reliable with restrictions)				
Pinene alpha   2 Rat 3956 mg/kg Male 4 (not assignable)   3 Rat 4800 mg/kg Male 4 (not assignable)   1 Rat 3700 mg/kg Male 4 (not assignable)   4 Rat > 5000 mg/kg 4 (not assignable)   9.7		2 Rat 4300 mg/kg Male 2	I	
assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  4 Rat > 5000 mg/kg 2 (reliable with restrictions)  Terpinolene  1 Rat 4,39 m/kg 2 (reliable with restrictions)  Limonene D  1 Mouse 5600 mg/kg Male 4 (not assignable)  2 Mouse 6600 mg/kg Female 4 (not assignable)  3 Rat 4400 mg/kg Female 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Male 4 (not assignable)  6 Rat > 2000 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg female 4 (not assignable)  8 Rat > 5000 mg/kg female 4 (not assignable)  2 Rat 4,3 g/kg Female, Male 4 (not assignable)  8 Rat > 5000 mg/kg female 2 (reliable with restrictions)  3 Rat 4,5 g/kg Female 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 4 (not assignable)  1 Rat 3950 mg/kg Male 4 (not assignable)  4 Rat 4,7 g/kg Male 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 2 (reliable with restrictions)  4 Rat 4,7 g/kg Male 4 (not assignable)  1 Rat 3900 mg/kg Male 4 (not assignable)  1 Rat 3900 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 1390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions)		(reliable with restrictions)		
3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Cymene para  1 +/- Rat 4765 mg/kg 2 (reliable with restrictions)  Terpinolene  1 Rat 4.39 ml/kg 2 (reliable with restrictions)  Limonene D  1 Mouse 5600 mg/kg Male 4 (not assignable)  2 Mouse 5600 mg/kg Male 4 (not assignable)  3 Rat 4400 mg/kg Male 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Male 4 (not assignable)  6 Rat > 2000 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Male 4 (not assignable)  1 Rat 2480 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Female 2 (reliable with restrictions)  3 Rat 4.3 g/kg Female 2 (reliable with restrictions)  3 Rat 4.5 g/kg Female 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  7 Rat 4.8000 mg/kg Male 4 (not assignable)  4 Rat 5.000 mg/kg Male 4 (not assignable)  6 Rat 5.000 mg/kg Male 4 (not assignable)  6 Rat 5.000 mg/kg Male 4 (not assignable)  7 Rat 5.000 mg/kg Male 4 (not assignable)  8 Rat 5.000 mg/kg Male 4 (not assignable)	Pinene alpha	2 Rat 3956 mg/kg Male 4 (not	4	-
assignable   1 Rat 3700 mg/kg Male 4 (not assignable)   4 Rat > 5000 mg/kg 4 (not assignable)   4 Rat > 5000 mg/kg 4 (not assignable)   9.7		assignable)		
1 Rat 3700 mg/kg Male 4 (not assignable)		3 Rat 4800 mg/kg Male 4 (not		
A Rat > 5000 mg/kg 4 (not assignable)				
A Rat > 5000 mg/kg 4 (not assignable)		1 Rat 3700 mg/kg Male 4 (not	I	
Assignable   Sylvanor   Sylvano		assignable)		
Terpinolene		4 Rat > 5000 mg/kg 4 (not	I	
With restrictions		assignable)		
Terpinolene	Cymene para	1 +/- Rat 4750 mg/kg 2 (reliable	-	9.7
Limonene D		with restrictions)		
Limonene D  1 Mouse 5600 mg/kg Male 4 (not assignable) 2 Mouse 6600 mg/kg Female 4 (not assignable) 3 Rat 4400 mg/kg Male 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 5 Rat 5300 mg/kg Male 4 (not assignable) 6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 9 Rat > 5000 mg/kg A (not assignable) 1 Rat 2480 mg/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 5 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 5 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2	Terpinolene		-	
(not assignable) 2 Mouse 6600 mg/kg Female 4 (not assignable) 3 Rat 4400 mg/kg Male 4 (not assignable) 4 Rat 5200 mg/kg Female 4 (not assignable) 5 Rat 5300 mg/kg Male 4 (not assignable) 6 Rat > 2000 mg/kg Male 4 (not assignable) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female, Male 4 (not assignable) 2 Rat 4.5 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3966 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 5 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2				
2 Mouse 6600 mg/kg Female 4	Limonene D		-	
(not assignable)  3 Rat 4400 mg/kg Male 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Male 4 (not assignable)  6 Rat > 2000 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg 4 (not assignable)  1 Rat 2480 mg/kg Female, Male  4 (not assignable)  2 Rat 4.3 g/kg Female 2 (reliable with restrictions)  3 Rat 4.5 g/kg Female 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta  2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4.70 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 5 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2				
3 Rat 4400 mg/kg Male 4 (not assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Male 4 (not assignable)  6 Rat > 2000 mg/kg Male 4 (not assignable)  7 Rat > 5000 mg/kg Male 4 (not assignable)  8 Rat > 5000 mg/kg A (not assignable)  8 Rat > 5000 mg/kg A (not assignable)  2 Rat 4.3 mg/kg Female, Male  4 (not assignable)  2 Rat 4.3 g/kg Female 2 (reliable with restrictions)  3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta  2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 5000 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg Male 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions)				
assignable)  4 Rat 5200 mg/kg Female 4 (not assignable)  5 Rat 5300 mg/kg Maile 4 (not assignable)  6 Rat > 2000 mg/kg Female 1 (reliable without restriction)  7 Rat > 5000 mg/kg Maile 4 (not assignable)  8 Rat > 5000 mg/kg Maile 4 (not assignable)  8 Rat > 5000 mg/kg 4 (not assignable)  1 Rat 2480 mg/kg Female, Maile  4 (not assignable)  2 Rat 4.3 g/kg Female 2 (reliable with restrictions)  3 Rat 4.5 g/kg Female 2 (reliable with restrictions)  4 Rat 4.7 g/kg Maile 2 (reliable with restrictions)  4 Rat 4.7 g/kg Maile 2 (reliable with restrictions)  Pinene beta  2 Rat 3956 mg/kg Maile 4 (not assignable)  3 Rat 4800 mg/kg Maile 4 (not assignable)  1 Rat 3700 mg/kg Maile 4 (not assignable)  1 Rat 3700 mg/kg Maile 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  4 Rat > 5000 mg/kg Alle 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Maile 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Maile 2 (reliable with restrictions)				
4 Rat 5200 mg/kg Female 4 (not assignable) 5 Rat 5300 mg/kg Male 4 (not assignable) 6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 9 Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 1300 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions)				
assignable) 5 Rat 5300 mg/kg Male 4 (not assignable) 6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 2 Rat 43 g/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Age Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Alee 2				
5 Rat 5300 mg/kg Male 4 (not assignable) 6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg Ale 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3966 mg/kg Male 4 (not assignable) 3 Rat 4.7 g/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable) 4 Rat > 5000 mg/kg Ale 4 (not assignable)			I	
assignable) 6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 8 Rat > 5000 mg/kg - 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
6 Rat > 2000 mg/kg Female 1 (reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Age Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Mg/kg Eemale, Male 2 (reliable with restrictions)			I	
(reliable without restriction) 7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable)  Eucalyptol 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.5 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female Allale 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3996 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 2 Rat 3900 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Male 4 (not assignable) 4 Rat > 1300 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 1300 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
7 Rat > 5000 mg/kg Male 4 (not assignable) 8 Rat > 5000 mg/kg 4 (not assignable) 1 Rat 2480 mg/kg Female, Male 4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg Age Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Age 2			I	
Assignable			I	
8 Rat > 5000 mg/kg 4 (not assignable)  Eucalyptol			I	
assignable				
Eucalyptol 1 Rat 2480 mg/kg Female, Male				
4 (not assignable) 2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2	Fucalvotol			
2 Rat 4.3 g/kg Female 2 (reliable with restrictions) 3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta  2 Rat 9866 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2	Lucalypion			
(reliable with restrictions) 3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
3 Rat 4.5 g/kg Female, Male 2 (reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
(reliable with restrictions) 4 Rat 4.7 g/kg Male 2 (reliable with restrictions) Pinene beta  2 Rat 3956 mg/kg Male 4 (not assignable) 3 Rat 4800 mg/kg Male 4 (not assignable) 1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg 4 (not assignable) 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2				
4 Rat 4.7 g/kg Male 2 (reliable with restrictions)  Pinene beta 2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2				
with restrictions)  Pinene beta  2 Rat 3956 mg/kg Male 4 (not assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 9 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2				
assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2				
assignable)  3 Rat 4800 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2	Pinene beta	2 Rat 3956 mg/kg Male 4 (not	ū.	
assignable)  1 Rat 3700 mg/kg Male 4 (not assignable)  4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2				
1 Rat 3700 mg/kg Male 4 (not assignable) 4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2		3 Rat 4800 mg/kg Male 4 (not		
assignable) 4 Ra > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2		assignable)		
4 Rat > 5000 mg/kg 4 (not assignable)  Myrcene 1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2		1 Rat 3700 mg/kg Male 4 (not		
assignable)  Myrcene  1 Mouse > 3380 mg/kg Female, Male 2 (reliable with restrictions)  2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions)  3 Rat > 5000 mg/kg Male 2		assignable)	I	
Myrcene 1 Mouse > 3380 mg/kg Fernale, Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Fernale, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2		assignable)		
Male 2 (reliable with restrictions) 2 Rat > 11390 mg/kg Female, Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2	Myrcene		-	-
Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2			I	
Male 2 (reliable with restrictions) 3 Rat > 5000 mg/kg Male 2		2 Rat > 11390 mg/kg Female,	I	
		Male 2 (reliable with restrictions)	I	
(reliable with restrictions)			I	
		(reliable with restrictions)		

**Skin irritation:** Causes skin irritation.

**Eye damage or irritation:** Causes serious eye irritation.

Respiratory or skin

sensitivity:

May cause sensitization by skin contact.

**Germ cell mutagenicity:** No information available.

Carcinogenicity: No information available.



Tea Tree Essential Oil SDS

Version: 1.0 Version Date: 28/04/2024

Reproductive toxicity:

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the

unborn child.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical Name	European Union	
gamma-Terpinene	Rep. 2	
para-Cymene	Rep. 2	

**STOT – single exposure:** May cause drowsiness or dizziness.

**STOT – repeated exposure:** No information available.

**Aspiration hazard:** May be fatal if swallowed and enters airways.

# 11.2. Information on other hazards

Information on other hazards:

No data.

# **Section 12: Ecological information**

# 12.1. Toxicity

**Toxicity:** Toxic to aquatic life with long lasting effects.

Contains 2.863% of components with unknown hazards to the aquatic

environment.

# 12.2. Persistence and degradability

Persistence and degradability:

No additional information available.

# 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Component information:

Chemical name	Partition coefficient	
Terpineol alpha	2.98	
Pinene alpha	4.83	
Cymene para	4.10	
Terpinolene	4.47	
Limonene D	4.232	
	4.57	
Eucalyptol	2.74	
Pinene beta	4.16	
Myrcopo	4.33	

# 12.4. Mobility in soil

**Mobility:** No additional information available.

# 12.5. Results of PBT and vPvB assessment

Results: No additional information available.

### 12.6. Endocrine disrupting properties

Endocrine disrupting potential:

Do not allow product to enter streams, sewers or other waterways.



Version Date: 28/04/2024

### 12.7. Other adverse effects

Other adverse effects: No data.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste from Should not be released into the environment. Dispose of in accordance

residues/unused products: with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging: Empty containers pose a potential fire and explosion hazard. Do not

cut, puncture or weld containers.

#### **Section 14: Transport information**

**UN number or ID number:** Road: 1197

Rail: 1197 Air: 1197

**UN proper shipping name:** IMDG: Extracts, Liquid (alpha-Pinene) Marine Pollutant

ADR, RID, ADN: Extracts, Liquid

ICAO TI: Extracts, Liquid

Transport hazard class(es): <u>IMDG</u>

UN number or ID number: 1197

UN proper shipping name: Extracts, Aromatic, Liquid

Transport hazard class(es): 3

Packing group: III

Environmental hazard: YES

Special precautions for user: Special provisions 223, 944, 955

EMS-No.: F-E, S-D

Maritime transport in bulk according to IMO instruments: IBC03

#### RID

UN number or ID number: 1197

UN proper shipping name: Aromatic, Liquid

Transport hazard class(es): 3

Packing group: III

Environmental hazard: Yes

Special precautions for user: Special provisions: None

# <u>ADR</u>

UN number or ID number: 1197

UN proper shipping name: Extracts, Aromatic, Liquid

Transport hazard class(es): 3

Packing group: III

Environmental hazard: Yes

Special precautions for user: Special provisions 601

Classification code: F1
Tunnel restriction code: D/E

#### **IATA**

UN number or ID number: 1197

Un proper shipping name: Extracts, Aromatic, Liquid

Transport hazard class(es): 3

Packing group: III

Environmental hazard: Yes

Special precautions for user: Special provisions A3

ERG code: 3L



Tea Tree Essential Oil SDS

Version: 1.0 Version Date: 28/04/2024

# **Transport labels:**



ADR/RID/ADN Packing group: III Packaging group:

IMDG Packing group: III ICAO Packing group: III

**Environmental hazards:** Environmentally Hazardous Substance/Marine Pollutant



Special precautions for

user:

No additional data available.

Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code:

No additional data.

# Section 15: Regulatory information

# Product specific safety, health & environmental regulations & legislation

**EU Directives:** Regulation (EC) no 2020/878 of the European parliament and of the

council of 18th December 2006. Concerning the registration, evaluation, authorization and restriction of chemicals (REACH), establishing a European chemicals agency, amending directive 1999/45/EC and repealing council regulation (EEC) No 793/93 and commission regulation (EC) No 1488/94 as well as council directive 76/769/EEC and commission directive 91/155/ECC, 93/67/ECC, 93/105/EEC and

2000/21/EC (including amendments).

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work. Dangerous substance category per Seveso Directive (2012/18/EU)

P5A - Flammable Liquids P5B - Flammable Liquids P5C - Flammable Liquids

E2 - Hazardous to the aquatic environment in category chronic 2. Germany: Water hazard class (WGK) strongly hazardous to water

(WGK 3).

The chemicals (hazard information and packaging for supply **Statutory instruments:** 

regulations 2009 (S.I.2009 No 716).

Approved code of practice: Classification and labelling of substances and preparations dangerous

for supply. Safety data sheets for substances and preparations.

**Guidance notes:** Workplace exposure limits EH40. CHIP for everyone HSG 108.

#### **Chemical Safety Assessment** 15.2.

Chemical safety assessment:



Version Date: 28/04/2024

### **Section 16: Other information**

### 16.1. Other information

Hazard and/or precautionary statements in full:

H226 - Flammable Liquid and Vapour.

H227 - Combustible Liquid.

H302 - Harmful If Swallowed.

H303 - May Be Harmful If Swallowed.

H304 - May Be Fatal If Swallowed and Enters Airways.

H313 - May Be Harmful in Contact with Skin.

H315 - Causes Skin Irritation.

H316 - Causes Mild Skin Irritation.

H317 - May Cause an Allergic Skin Reaction.

H319 - Causes Serious Eye Irritation.

H320 - Causes Eye Irritation.

H331 - Toxic If Inhaled.

H332 - Harmful If Inhaled.

H335 - May Cause Respiratory Irritation. H336 - May Cause Drowsiness or Dizziness.

H361 - Suspected of Damaging Fertility or The Unborn Child.

H400 - Very Toxic to Aquatic Life. H401 - Toxic to Aquatic Life. H402 - Harmful to Aquatic Life.

H410 - Very Toxic to Aquatic Life with Long Lasting Effects. H411 - Toxic to Aquatic Life with Long Lasting Effects. H412 - Harmful to Aquatic Life with Long Lasting Effects.

Other information:

\* Indicates text in the SDS which has changed since the last revision.

#### Legal disclaimer:

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product.

Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Compliance with all appropriate local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing.

Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary.

All health and safety information contained in this document should be provided to your employees or customers.