

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 1 of 15

**I. Identification of the substance/ mixture and of the company / undertaking****1.1 Product identifier****INCI NAME:** *Melaleuca alternifolia* Oil**COMMERCIAL NAME:** Tea Tree Essential Oil - organic and conventional**CAS:** 85085-48-9**EINECS:** 285-377-1

Processes used for the manufacture of the substance:

Water steam distillation of the leaves and twigs of *Melaleuca alternifolia* and subsequent separation of the water from the essential oil. The subsequent separation is a spontaneous physical process, which normally takes place in a separator (Florentine flask) enabling an easy isolation of the separated oil.

**1.2 Relevant identified uses of the substances or mixture and uses advised against**

Fragrance - Do not use during pregnancy or breastfeeding, do not use in children younger than 30 months

**1.3 Details on the supplier of the safety data sheet**

ECOMAIL SPRL

40C Rue Egide Van Ophem,

1180 Uccle

BELGIQUE

Tel: +32 2 538 79 73

[info@bioflore.be](mailto:info@bioflore.be)**1.4 Emergency telephone number**

Contacter le centre anti-poison du pays.

**2. Hazards identification****2.1 Classification of the substance or mixture**

Flam. Liq. 3, Acute Tox. 4, Asp. Tox. 1, Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2, Aquatic Chronic 2

**2.2 Label elements****Signal Word:** Danger**Hazard Statement:** H226: Flammable liquids, Hazard Category 3

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 2 of 15

H302: Acute toxicity (oral), Hazard Category 4

H304: Aspiration hazard, Hazard Category 1

H315: Skin corrosion/ irritation, Hazard Category 2

H317: Skin sensitisation, Hazard Category 1

H319: Serious eye damage/eye irritation, Hazard Category 2

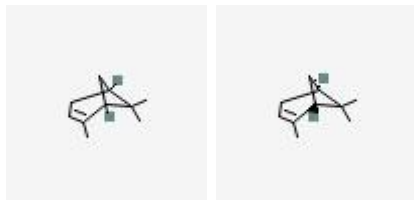
H411: Hazardous to the aquatic environment – Chronic Hazard Category 2

**Precautionary statement prevention:** P210, P233, P240, P241, P242, P243, P261, P264, P270, P272, P273, P280**Precautionary statement response:** P301 + P310, P302 + P352, P303 + P361 + P353, P305 + P351 + P338, P330, P331, P333 + P313, P337 + P313, P362, P363, P370 + P378, P391**Precautionary statement Storage:** P403 + P235, P405**Precautionary statement disposal:** 501**2.3 Other hazards**

No data available

**3 Composition/ Information on ingredients:****Substance type:** UVCB

Natural Complex Substance (NCS), 100% pure and natural

**Name:**  $\alpha$ -Pinene; **IUPAC Names:** 4,7,7-trimethylbicyclo[3.1.1]hept-3-ene and (1S,5S)-4,7,7-trimethylbicyclo[3.1.1]hept-3-ene; 1 to 10%SMILES : CC1=CCC2CC1C2(C)CMolecular Formula : C<sub>10</sub> H<sub>16</sub>

EINECS number: 201-291-9/ 232-077-3

CAS number: 80-56-8/ 7785-26-4

Signal word: Danger

Flam. Liq. 3, Asp. Tox. 1, Skin Irrit. 2, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 3 of 15

H226, H304, H315, H317, H400, H410

P210, P233, P240, P241, P242, P243, P264, P261, P272, P273, P280

P301 + P310, P302 + P352, P303 + P361 + P353, P333 + P313, P331, P362, P363, P370 + P378, P391

P403 + P235, P405

P501

**Name: thuj-4(10)-ene (sabinene); IUPAC name: 4- methylidene-1propan-2ylbicyclo[3.1.0]hexane; <5%**SMILES: CC(C)C12CCC(=C)C1C2Molecular formula: C<sub>10</sub>H<sub>16</sub>

EINECS number: 222-212-4

CAS number: 3387-41-5

Signal word: Warning

Flam. Liq. 3

H226

P210, P233, P240, P241, P242, P243, P280

P303 + P361 + P353, P370 + P378

P403 + P235

P501

**Name: α-Terpinene; IUPAC name: 1-methyl-4-propan-2-ylcyclohexa-1,3-diene; 5 to 15%**SMILES: CC1=CC=C(CC1)C(C)C

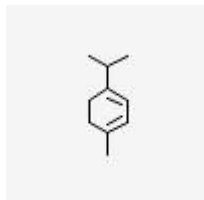
**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 4 of 15

Molecular formula: C<sub>10</sub> H<sub>16</sub>

EINECS number: 202-795-1

CAS number: 99-86-5

Signal words: Warning

Flam. Liq. 3, Acute Tox. 4, Eye Irrit. 2, Skin Irrit. 2, STOT SE 3, Aquatic Chronic 2

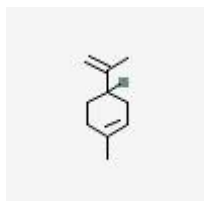
H226, H302, H319, H315, H335, H411

P210, P233, P240, P241, P242, P243, P261, P264, P270, P271, P273, P280

P301 + P312, P302 + P352, P303 + P361 + P353, P304 + P340, P305 + P351 + P338, P312, P321, P330,  
P332 + P313, P337 + P313, P362, P370 + P378

P403 + P233, P403 + P235, P405

P501

**Name: Limonene (D,L); IUPAC name: 1-methyl-4-prop-1-en-2-ylcyclohexene; <5%**SMILES : CC1=CCC(CC1)C(=C)CMolecular Formula : C<sub>10</sub> H<sub>16</sub>

EINECS numbers: dextro: 227-813-5

laevo: 227-815-6

CAS numbers: dextro: 5989-27-5

laevo: 5989-54-8

Signal word: Danger

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 5 of 15

Flam Liq. 3, Skin Irrit. 2, Skin Sens. 1, Asp. Tox. 1, Aquatic Acute 1, Aquatic Chronic 1

H226, H315, H317, H304, H400, H410

P210, P233, P240, P241, P242, P243, P261, P264, P273, P280

P301 + P310, P302 + P352, P303 + P361 + P353, P331, P333 + P313, P362, P363, P370 + P378, P391

P403 + P233, P403 + P235, P405

P501

**Name: 1,8-Cineole; IUPAC name: 4,7,7-trimethyl-8-oxabicyclo[2.2.2]octane; 0 to 15%**SMILES: CC1(C2CCC(O1))(CC2)CMolecular formula: C<sub>10</sub> H<sub>18</sub> O

EINECS number: 207-431-5

CAS number: 470-82-6

Signal word: Warning

Flam. Liq. 3, Eye Irrit. 2

H226, H319

P210, P233, P240, P241, P242, P243, P264, P280

P303 + P361 + P353, P370 + P378, P305 + P351 + P338, P337 + P313

P403 + P235

P501

**Name:  $\Gamma$ - Terpinene; IUPAC name: 1-methyl-4-propan-2-ylcyclohexa-1,4-diene; 10 to 30%**

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

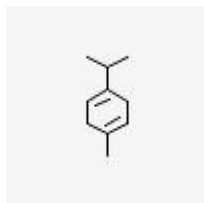
Version: 1.3

Effective date: 04.12.2017

Page 6 of 15

SMILES : CC1=CCC(=CC1)C(C)C

Molecular Formula : C10 H16



EINECS number: 202-794-6

CAS number: 99-85-4

Signal words: warning

Flam. Liq. 3, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3

H226, H315, H319, H335

P210, P233, P240, P241, P242, P243, P261, P264, P271, P280

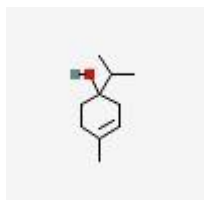
P302 + P352, P303 + P361 + P353, P303 + P340, P305 + P351 + P338, P312, P321, P332 + P313, P337 + P313, P362, P370 + P378

P403 + P233, P403 + P235, P405

P501

**Name: Terpinen-4-ol; IUPAC name: 4-methyl-1-propan-2-ylcyclohex-3-en-1-ol; 30 to 50%**SMILES : CC1=CCC(CC1)(C(C)C)O

Molecular Formula : C10 H18 O



EINECS number: 209-235-5

CAS number: 562-74-3

Signal words: warning

Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 7 of 15

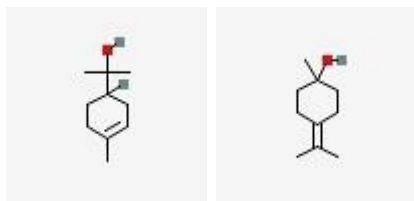
H302, H319, H335, H315

P261, P264, P270, P271, P280

P301 + P312, P302 + P352, P304 + P340, P305 + P351 + P338, P312, P321, P330, P332 + P313, P337 + P313, P362

P403 + P233, P405

P501

**Name:  $\alpha$ -Terpineol; IUPAC name: 2-(4-methylcyclohex-3-en-1-yl)propan-2-ol; 1 to 10%**SMILES : CC1=CCC(CC1)C(C)(C)O / CC(=C1CCC(CC1)(C)O)CMolecular Formula : C<sub>10</sub> H<sub>18</sub> O

EINECS number: 202-680-6

CAS number: 98-55-5

Signal word: Warning

Skin Irrit. 2, Eye Irrit. 2

H315, H319

P264, P280

P302 + P352, P305 + P351 + P338, P321, P332 + P313, P337 + P313, P362

**Name: Terpinolene; IUPAC name: 1-methyl-4-propan-2-ylidenecyclohexene; 1 to 5%**SMILES: C/C(C)=C1CCC(C)=CC/1Molecular Formula: C<sub>10</sub> H<sub>16</sub>

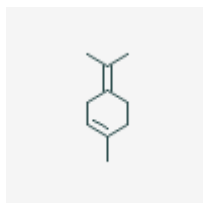
**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 8 of 15



EINECS number: 209-578-0

CAS number: 586-62-9

Signal word: Danger

Flam. Liq. 3, Asp. Tox. 1, Aquatic Chronic. 2

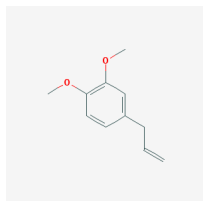
H226, H304, H411

P210, P233, P240, P241, P242, P243, P273, P280

P301 + P310, P303 + P361 + P353, P331, P370 + P378, P391

P403 + P235, P405

P501

**Name: Methyleugenol; IUPAC name: 1,2-dimethoxy-4-prop-2-enylbenzene; < 0.1%**SMILES: COC1=C(C=C(C=C1)CC=C)OCMolecular formula: C<sub>11</sub> H<sub>14</sub> O<sub>2</sub>

EINECS number: 202-223-0

CAS number: 93-15-2

Signal word: Warning

Acute Tox. 4, Skin Sens. 1, Muta. 2, Carc. 2

H302, H317, H341, H351

P201, P202, P361, P264, P270, P272, P280, P281

P301 + P312, P302 + P352, P308 + P313, P321, P330, P333 + P313, P363



	<b>SAFETY DATA SHEET</b> (In compliance with EU regulation 1907/2006 and its adaptations)	
	<b>Tea Tree Essential Oil</b>	
	Document Number: FO-QCD-EO-SDS-16	Version: 1.3
	Effective date: 04.12.2017	Page 9 of 15

P405

P501



## 4. First aid measures

### 4.1. Description of first aid measures

**IN THE EVENT OF EXCESSIVE INHALATION:** remove the individual to fresh air and keep at rest. Obtain medical advice immediately.

**IN THE EVENT OF SKIN CONTACT:** wash with plenty of soap and water, take off contaminated clothing and wash before reuse. If skin irritation occurs get medical advice/ attention. If skin irritation or rash occurs get medical advice/ attention.

**IN THE EVENT OF EYE CONTACT:** rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists get medical advice/ attention.

**IN THE EVENT OF INGESTION:** rinse mouth with water and get medical advice. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.

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

The most important known symptoms and effects are described in the labeling of the product (Section 2) and / or in section 11. Further symptoms are possible.

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

Symptomatic treatment.

## 5. Firefighting measures

### 5.1 Extinguishing media

**RECOMMENDED:** carbon dioxide, special liquids or dry powder extinguishers

**USABLE:** foam of halogen extinguishers

**INADVISABLE:** direct water jet

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

May produce toxic gases (carbon oxides) upon burning.

### 5.3 Advice for fire fighters

Fire fighters should wear positive pressure self-contained breathing apparatus.

	<b>SAFETY DATA SHEET</b> (In compliance with EU regulation 1907/2006 and its adaptations)	
	<b>Tea Tree Essential Oil</b>	
	Document Number: FO-QCD-EO-SDS-16	Version: 1.3
	Effective date: 04.12.2017	Page 10 of 15

Closed containers may build up pressure under elevated temperatures. If possible, containers should be cooled with a water spray.

## **6. Accidental release measures**

### **6.1 Personal precaution, protective equipment and emergency procedures**

Prevent contact with eyes and skin. Wear eye shields or protective clothing.  
Avoid inhalation of vapours  
Keep away from open fire or other sources of ignition

### **6.2 Environmental precautions**

Contain spilled material to avoid a possible contamination of the environment.  
Avoid any discharge in the sewer system and in natural environment.

### **6.3 Methods and material for containment and cleaning up**

Cover with an inert, non-combustible, inorganic absorbent material.  
Sweep up and remove to an approved disposal container.

### **6.4 Reference to other sections:**

See section 8 and 13.

## **7. Handling and storage**

### **7.1 Precautions for safe handling**

To avoid fire hazards, products should not be heated with or exposed to open flames or other sources of ignition.

During the introduction of the ingredients into the final product, ingredients should be normally kept at relatively low temperatures.

Measures should be taken to prevent materials from being splashed into the eyes or the skin. This should include wearing eye shields and protective clothing.

Maintain adequate air circulation in the working areas.

Smoking should not be permitted in areas where the product is handled.

Materials used for cleaning up spillages should be disposed of promptly, preferably by incineration as cases of spontaneous combustion of product soaked in rags have been reported.

### **7.2 Storage**

Store in closed containers, away from heat sources, air or light and protected from extremes of temperature.

Recommended packaging: lacquer lined container, glass

Packaging materials to be avoided: iron

### **7.3 Specific end use**

Comply with regulations and specifications of the product. No specific recommendations. Apply the rules of handling above.

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 11 of 15

## 8. Exposure controls/ Personal protection

### 8.1 Control parameters

Ventilation: provide adequate ventilation, use local exhaust fan if necessary

Ingredients with occupational exposure limit values: not available

### 8.2 Exposure controls

Eye protection: in general the use of safety glasses is recommended

Hand protection: the use of chemical resistant gloves is recommended

Skin protection: usual precautions

Respiratory protection: in well ventilated areas, respiratory protection is not normally required; in confined poorly ventilated areas, respiratory protection may be required.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

**(a) Appearance:**
**Physical state:** liquid

**Colour:** colourless to pale yellow

**(b) Odour:**

spicy, nutmeg pine, warm terpene

**(c) Odour threshold:**

not determined

**(d) pH:**

not determined

**(e) Melting point/freezing point:**

not determined

**(f) Initial boiling point and boiling range:**

not determined

**(g) Flash point:**

+55.6°C

**(h) Evaporation rate:**

not determined

**(i) Flammability (solid, gas):**

not determined

**(j) Upper/lower flammability or explosive limits:**

not determined

**(k) Vapour pressure:**

not determined

**(l) Vapour density:**

not determined

**m) Relative density:**

+/- 0.89

**(n) Solubility (ies):**

insoluble in water, liposoluble

**(o) Partition coefficient: n-octanol/water:**

not determined

**(p) Auto-ignition temperature:**

not determined

**(q) Decomposition temperature:**

not determined

**(r) Viscosity:**

not determined

**(s) Explosive properties:**

not determined

**(t) Oxidising properties:**

not determined

### 9.2 Other information

No data available

## SAFETY DATA SHEET

(In compliance with EU regulation 1907/2006 and its adaptations)

### Tea Tree Essential Oil

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 12 of 15

## 10. Stability and reactivity

- 10.1 Reactivity:** no data available
- 10.2 Chemical stability:** no significant changes in the composition in time respecting the storage conditions described in 7.2.
- 10.3 Possibility of hazardous reactions:** no data available
- 10.4 Conditions to avoid:** excessive heat, open flames or other sources of ignition
- 10.5 Incompatible materials:** no data available
- 10.6 Hazardous decomposition products:** none in normal use

## 11. Toxicological information

### Information on toxicological effects

- (a) Acute toxicity:** Oral Toxicity (LD50): Oral-Rat 1900.00 mg/kg  
Dermal Toxicity (LD50): Skin-Rabbit 5000.00 mg/kg
- (b) Skin corrosion/irritation:** no data available
- (c) Serious eye damage/irritation:** no data available
- (d) Respiratory or skin sensitisation:** no data available
- (e) Germ cell mutagenicity:** no data available
- (f) Carcinogenicity:** no data available
- (g) Reproductive toxicity:** no data available
- (h) STOT-single exposure:** no data available
- (i) STOT-repeated exposure:** no data available
- (j) Aspiration hazard:** aspiration toxicity cannot be excluded

**Information on likely routes of exposure:** no data available

**Symptoms related to the physical, chemical and toxicological characteristics:** no data available

**Delayed and immediate effects as well as chronic effects from short and long-term exposure:** no data available

**Interactive effects:** no data available

**11.2 Other information on toxicological effects:** no data available

## 12. Ecological information

- 12.1. Toxicity:** no data available
- 12.2. Persistence and degradability:** no data available
- 12.3. Bioaccumulative potential:** no data available

## SAFETY DATA SHEET

(In compliance with EU regulation 1907/2006 and its adaptations)

### Tea Tree Essential Oil

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 13 of 15

**12.4. Mobility in soil:** no data available

**12.5. Results of PBT and vPvB assessment:** no data available

**12.6. Other adverse effects:** no data available

## **13. Disposal considerations**

### **13.1. Waste treatment methods:**

Excessive quantities should not be permitted to enter drains, sewers or watercourses.  
Dispose of in accordance with local regulations.

## **14. Transport information**

**14.1 UN number:** UN 1169

**14.2. UN proper shipping name:** extracts, aromatic, liquid

**14.3. Transport hazard class (es):** 3

**14.4. Packing group:** III

**14.5. Environmental hazards:** Hazardous to the aquatic environment – Chronic hazard, Category 2

**14.6. Special precautions for user:** Store in closed containers, away from heat sources, air or light and protected from extremes of temperature.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** not concerned

## **15. Regulatory information**

### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

This SDS was written in accordance with Regulation (EC) No. 1907/2006 and its adaptations, modified by Regulation (EU) n°776/2017.

### **15.2 Chemical safety assessment:**

No chemical safety assessment has been carried out.

## **16. Other information**

This safety data sheet completes the specification sheet but does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on

**SAFETY DATA SHEET**

(In compliance with EU regulation 1907/2006 and its adaptations)

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 14 of 15

the basis of our best knowledge of the product. However, we cannot accept responsibility or liability for any consequences arising from its use.

We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned.

It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.

**Indication of changes:** New safety data sheet in accordance with EC 776/2017

**Legend to abbreviations and acronyms used:**

EC: European Community

INCI: International Nomenclature of Cosmetic Ingredients

CAS: Chemical Abstract Service

EINECS: European Inventory of Existing Commercial Chemical Substance

Irrit.: irritation

Sens.: sensitisation

Tox.: toxicity

pH: potential Hydrogen

STOT: Specific Target Organ Toxicant

PBT: persistent bio accumulative toxic chemical

vPvB: very Persistent very Bio accumulative chemical

UN: United Nations

**Bibliography:****List of relevant hazard statements, safety phrases and/or precautionary statements:**

H226: Flammable liquid and vapour.

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.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H411: Toxic to aquatic life with long lasting effects.

P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

P261: avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264: wash hands thoroughly after handling

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

**SAFETY DATA SHEET**

(In compliance with EU regulation 1907/2006 and its adaptations)

**Tea Tree Essential Oil**

Document Number: FO-QCD-EO-SDS-16

Version: 1.3

Effective date: 04.12.2017

Page 15 of 15

P273: avoid release to the environment

P280: wear protective gloves/ protective clothing/ eye protection/ face protection

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302 + P352: IF ON SKIN: wash with plenty of soap and water

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P305 + P351 + P338: IF IN EYES; rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P321: specific treatment (see on this label)

P330: Rinse mouth.

P331: Do NOT induce vomiting. Wash contaminated clothing before reuse.

P332 + P313: if skin irritation occurs: get medical advice/ attention

P333 + P313: if skin irritation or rash occurs: get medical advice/ attention

P337 + P313: if eye irritation persists: get medical advice/ attention

P362: take off contaminated clothing and wash before reuse

P363: Wash contaminated clothing before reuse.

P370 + P378: In case of fire: Use ... for extinction.

P391: Collect spillage.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P403 + P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501: dispose of contents/ container in accordance with local/ regional/ national/ international regulation.