



SAFETY DATA SHEET

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)
Product number	58736
CAS number	97553-36-1
EC number	307-193-3

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Fragrance
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS@UnivarSolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	58736

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Skin Sens. 1 - H317
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

2.2. Label elements

EC number	307-193-3
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Hazard pictograms



Signal word

Warning

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Hazard statements	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P302+P352 IF ON SKIN: Wash with plenty of water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	2-PINENE, EUCALYPTOL, (R)-P-MENTHA-1,8-DIENE, CITRONELLOL

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

2-PINENE		30-60%
CAS number: 80-56-8	EC number: 201-291-9	
M factor (Acute) = 1	M factor (Chronic) = 1	
Classification Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		
EUCALYPTOL		10-30%
CAS number: 470-82-6	EC number: 207-431-5	
Classification Flam. Liq. 3 - H226 Skin Sens. 1B - H317		
[1AR-(1AA,4B,4AB,7A,7AB,7BA)]-DECAHYDRO-1,1,4,7-TETRAMETHYL-1H-CYCLOPROP[E]AZULEN-4-OL		5-10%
CAS number: 552-02-3	EC number: 209-003-3	
Classification Not Classified		

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

[1AR-(1AA,4A,4AA,7A,7AB,7BA)]-DECAHYDRO-1,1,4,7-TETRAMETHYL-1H-CYCLOPROP[E]AZULEN-4-OL			5-10%
CAS number: 489-41-8 EC number: 207-696-7			
Classification Not Classified			
CITRONELLOL			1-5%
CAS number: 106-22-9 EC number: 203-375-0 REACH registration number: 01-2119453995-23-XXXX			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317			
(R)-P-MENTHA-1,8-DIENE			1-5%
CAS number: 5989-27-5 EC number: 227-813-5 REACH registration number: 01-2119529223-47-XXXX			
M factor (Acute) = 1 M factor (Chronic) = 1			
Classification Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410			
BICYCLOGERMACRENE			1-5%
CAS number: 24703-35-3			
Classification Not Classified			
1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL			1-5%
CAS number: 98-55-5 EC number: 202-680-6 REACH registration number: 01-2119980717-23-XXXX			
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

[1AR-(1AA,7A,7AB,7BA)]-1A,2,3,5,6,7,7A,7B-OCTAHYDRO-1,1,4,7-TETRAMETHYL-1H-CYCLOPROP[E]AZULENE CAS number: 21747-46-6 EC number: 244-565-3	1-5%
Classification Not Classified	
SPATHULENOL CAS number: 6750-60-3	<1%
Classification Not Classified	
ISOAMYL ISOVALERATE CAS number: 659-70-1 EC number: 211-536-1	<1%
Classification Aquatic Chronic 2 - H411	
LEPTOSPERMONE CAS number: 567-75-9	<1%
Classification Not Classified	
TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN CAS number: 16409-43-1 EC number: 240-457-5	<1%
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361f Aquatic Chronic 3 - H412	

The full text for all hazard statements is displayed in Section 16.

Product name	PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)
CAS number	97553-36-1
EC number	307-193-3
Composition comments	The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if symptoms are severe or persist.
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PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention.
Skin contact	Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse for at least 10 minutes. Get medical attention.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention.

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

Ingestion	Harmful if swallowed.
Skin contact	Causes skin irritation. May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Keep unnecessary and unprotected personnel away from the spillage. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn.
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6.2. Environmental precautions

Environmental precautions	Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin and eyes. Persons susceptible to allergic reactions should not handle this product. Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Advice on general occupational hygiene Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid exposure to high temperatures or direct sunlight. Container must be kept tightly closed when not in use.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

(R)-P-MENTHA-1,8-DIENE (CAS: 5989-27-5)

DNEL Workers - Inhalation; Long term systemic effects: 66.7 mg/m³
 Workers - Dermal; Long term systemic effects: 9.5 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 16.6 mg/m³
 Consumer - Dermal; Long term systemic effects: 4.8 mg/kg/day
 Consumer - Oral; Long term systemic effects: 4.8 mg/kg/day

PNEC Fresh water; 14 µg/l
 marine water; 1.4 µg/l
 STP; 1.8 mg/l
 Sediment (Freshwater); 3.85 mg/kg
 Sediment (Marinewater); 0.385 mg/kg
 Soil; 0.763 mg/kg

CITRONELLOL (CAS: 106-22-9)

DNEL Workers - Dermal; Long term systemic effects: 45.8 mg/kg/day
 Workers - Inhalation; Long term systemic effects: 161.6 mg/m³
 Workers - Dermal; Long term local effects: 29.5 mg/cm²
 Consumer - Dermal; Long term systemic effects: 27.5 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³
 Consumer - Oral; Long term systemic effects: 13.8 mg/kg/day
 Consumer - Dermal; Long term local effects: 29.5 mg/cm²

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

PNEC

- Fresh water; 0.0024 mg/l
- marine water; 0.00024 mg/l
- STP; 580 mg/l
- Sediment (Freshwater); 0.0256 mg/l
- Sediment (Marinewater); 0.00256 mg/l
- Soil; 0.00371 mg/l

TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN (CAS: 16409-43-1)

DNEL

- Workers - Dermal; Long term systemic effects: 0.3 mg/kg
- Workers - Inhalation; Long term systemic effects: 1.2 mg/m³
- Consumer - Inhalation; Long term systemic effects: 0.3 mg/m³
- Consumer - Dermal; Long term systemic effects: 0.2 mg/kg
- Consumer - Oral; Long term systemic effects: 0.2 mg/kg

PNEC

- Fresh water; 0.0332 mg/l
- marine water; 0.00332 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 2.29 mg/kg
- Sediment (Marinewater); 0.229 mg/kg
- Soil; 0.437 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours and contact with skin and eyes.

Eye/face protection

Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Polyethylene. Polyvinyl alcohol (PVA). To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Care should be taken to avoid contact with contaminants when removing contaminated clothing.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Liquid.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	200°C
Flash point	55°C
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	0.89 - 0.92
Bulk density	No information available.
Solubility(ies)	Slightly soluble in water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	This product contains a maximum VOC content of 306.72 g/l.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No test data specifically related to reactivity available for this product or its ingredients.
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PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid No specific recommendations.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,666.67

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Ingestion	Harmful if swallowed.
Skin contact	Causes skin irritation. May cause an allergic skin reaction. Symptoms following overexposure may include the following: Irritation. Redness.
Eye contact	May cause temporary eye irritation.

Toxicological information on ingredients.

2-PINENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	500.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ 3700 mg/kg, Oral, Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	5,000.0
Species	Rat
Notes (dermal LD₅₀)	LD ₅₀ 5000 mg/kg, Dermal, Rat
ATE dermal (mg/kg)	5,000.0

Inhalation	May cause respiratory system irritation.
Ingestion	Harmful: may cause lung damage if swallowed.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.

EUCALYPTOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	2,480.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ 2480 mg/kg, Oral, Rat
ATE oral (mg/kg)	2,480.0

Acute toxicity - dermal

Notes (dermal LD₅₀)	LD ₅₀ >5000 mg/kg, Dermal, Rabbit
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Skin corrosion/irritation

Skin corrosion/irritation	No information available.
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Serious eye damage/irritation

Serious eye damage/irritation	No information available.
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PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact May cause an allergic skin reaction.

Eye contact May cause temporary eye irritation.

CITRONELLOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,450.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3450 mg/kg, Oral, Rat

ATE oral (mg/kg) 3,450.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,650.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 2650 mg/kg, Dermal, Rabbit

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

ATE dermal (mg/kg) 2,650.0

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. Rabbit

Skin sensitisation

Skin sensitisation - Rabbit: Sensitising.

(R)-P-MENTHA-1,8-DIENE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 4400 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Inhalation May cause respiratory system irritation.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Ingestion	Harmful: possible risk of irreversible effects if swallowed.
Skin contact	Irritating to skin. May cause sensitisation by skin contact.
Eye contact	May cause temporary eye irritation.

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	4,300.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ 4300 mg/kg, Oral, Rat
ATE oral (mg/kg)	4,300.0

Acute toxicity - dermal

Notes (dermal LD₅₀)	LD ₅₀ > 3000 mg/kg, Dermal, Rabbit
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Skin corrosion/irritation

Skin corrosion/irritation	Irritating to skin. Rabbit
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Serious eye damage/irritation

Serious eye damage/irritation	Irritating to eyes. Rabbit
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Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
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Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative.
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Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 314 mg/kg, Oral, Rat (90 days ; 7 days/week)
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TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	2,001.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ > 2000 mg/kg, Oral, Rat
ATE oral (mg/kg)	2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Skin corrosion/irritation

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Animal data

Irritating.

SECTION 12: Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

2-PINENE

Ecotoxicity

The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

EUCALYPTOL

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

(R)-P-MENTHA-1,8-DIENE

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity

Very toxic to aquatic life.

Ecological information on ingredients.

2-PINENE

Acute aquatic toxicity

LE(C)₅₀0.1 < L(E)C₅₀ ≤ 1

M factor (Acute)

1

Acute toxicity - aquatic invertebrates

LC₅₀, 48 hour: 6.74 mg/l, Daphnia magna

Chronic aquatic toxicity

NOEC

0.01 < NOEC ≤ 0.1

Degradability

Non-rapidly degradable

M factor (Chronic)

1

EUCALYPTOL

Toxicity

Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 102 mg/l, Fish

CITRONELLOL

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 14.6 mg/l,

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 17.5 mg/l, Daphnia magna

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Acute toxicity - aquatic plants IC₅₀, 72 hours: 2.4 mg/l, Algae

(R)-P-MENTHA-1,8-DIENE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 0.8 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 69.6 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic) 1

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hour: 70 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hour: 73 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hour: 68 mg/l, Algae
OECD 201

TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hour: 77.6 mg/l, Fish
OECD 203

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 33.2 mg/l, Daphnia magna
OECD 202

Acute toxicity - aquatic plants EC₅₀, 72 hour: 79.7 mg/l, Algae
OECD 201
EC₁₀, 72 hour: 39.1 mg/l, Algae
OECD 201

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.

2-PINENE

Persistence and degradability The product is readily biodegradable.

EUCALYPTOL

Persistence and degradability The substance is readily biodegradable.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

CITRONELLOL

Persistence and degradability	The substance is readily biodegradable.
Biodegradation	- Degradation 80 - 90%: 28 days OECD 301F

(R)-P-MENTHA-1,8-DIENE

Persistence and degradability	Not readily biodegradable.
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1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 80%: 28 day

TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN

Persistence and degradability	The product is readily biodegradable.
Biodegradation	- Degradation 79%: 28 days OECD 301F

12.3. Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	No information available.

Ecological information on ingredients.

EUCALYPTOL

Bioaccumulative potential	No data available on bioaccumulation.
Partition coefficient	log Pow: 2.97

CITRONELLOL

Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: 3.91

(R)-P-MENTHA-1,8-DIENE

Bioaccumulative potential	Potentially bioaccumulating.
Partition coefficient	log Pow: 5.3

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: 2.67

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

TETRAHYDRO-4-METHYL-2-(2-METHYLPROP-1-ENYL)PYRAN

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 3.3

12.4. Mobility in soil

Mobility The product is partly soluble in water and may spread in the aquatic environment.

Ecological information on ingredients.

2-PINENE

Mobility The product is insoluble in water.

EUCALYPTOL

Mobility The product is insoluble in water.

(R)-P-MENTHA-1,8-DIENE

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

EUCALYPTOL

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

(R)-P-MENTHA-1,8-DIENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

EUCALYPTOL

Other adverse effects None known.

(R)-P-MENTHA-1,8-DIENE

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID)	1169
UN No. (IMDG)	1169
UN No. (ICAO)	1169
UN No. (ADN)	1169

14.2. UN proper shipping name

Proper shipping name (ADR/RID) EXTRACTS, AROMATIC, LIQUID

Proper shipping name (IMDG) EXTRACTS, AROMATIC, LIQUID (CONTAINS 2-PINENE, (R)-P-MENTHA-1,8-DIENE)

Proper shipping name (ICAO) EXTRACTS, AROMATIC, LIQUID

Proper shipping name (ADN) EXTRACTS, AROMATIC, LIQUID

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels



14.4. Packing group

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS	F-E, S-D
ADR transport category	3

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)**Emergency Action Code** 3Y**Hazard Identification Number** 30
(ADR/RID)**Tunnel restriction code** (D/E)**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code****Transport in bulk according to** Not applicable.
Annex II of MARPOL 73/78
and the IBC Code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

EU legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

This product may impact SEVESO storage regulations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories**EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

SECTION 16: Other information

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

02/09/2019

Version number

1.000

SDS number

58736

SDS status

Approved.

PURE AUSTRALIAN KUNZEA OIL (KUNZEA AMBIGUA)

Hazard statements in full

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.
H361f Suspected of damaging fertility.
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.
H412 Harmful to aquatic life with long lasting effects.

Signature

Jitendra Panchal