

zen 🕅 aroma

### Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996) Issue date: 7/11/2022 Version: 1.0

SECTION 1: Identification	
1.1 Product identifier	
Product name	: Aventois :
Product form	Mixture
Product code	: 49542F
1.2 Other means of identification	
No additional information available	
1.3 Recommended use of the chemical and i	restrictions on use
Recommended use	: Perfumes, Fragrances
1.4 Details of manufacturer or importer	
ZEN AROMA	
22c Portside Drive	
Mt Maunganui, 3116	
New Zealand	
PH: 07 578 4755	
support@zenaroma.co.nz	
1.5. Emergency phone number	
Emergency number	0800 764 766 NZ Poisons Centre
SECTION 2: Hazard identification	
2.1. Classification of the hazardous chemica	d in the second s
Classification according to the Environmental Pro	tection Authority notices (EPA Hazardous Substances and New Organisms Act 1996)
Flammable liquids Category 4	H227
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitization, Category 1	H317
Hazardous to the aquatic environment – Chronic Haza	ard Category 2 H411
2.2. GHS Label elements, including precaution	onary statements
GHS NZ labelling	
Hazard pictograms (GHS NZ)	
	$\vee$ $\vee$
Signal word (GHS NZ)	: Warning
Containa	: Lingly accepted (7.715, 15.42.%); Linglool (6.665, 12.22.%); Los E. Super (4.25, 9.7.%);

Hazard statements (GHS NZ)

Contains

Prevention

7/11/2022 (Issue date)

%); Lemon oil (1.58 – 3.16 %)

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

: H227 - Combustible liquid H315 - Causes skin irritation

No smoking.

: Linalyl acetate (7.715 – 15.43 %); Linalool (6.665 – 13.33 %); Iso E Super (4.35 – 8.7 %); Citronellol Pure (3.505 – 7.01 %); d-Limonene (1.72 – 3.44 %); Bergamot oil (1.72 – 3.44

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

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

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P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

### 2.3. Other hazards which do not result in classification

No additional information available

### **SECTION 3: Composition and information on ingredients**

### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to GHS NZ
Linalyl acetate	CAS-No.: 115-95-7	7.715 – 15.43	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Linalool	CAS-No.: 78-70-6	6.665 – 13.33	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Iso E Super	CAS-No.: 54464-57-2	4.35 – 8.7	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Citronellol Pure	CAS-No.: 106-22-9	3.505 – 7.01	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Ethylene brassylate	CAS-No.: 105-95-3	1.755 – 3.51	Aquatic Chronic 2, H411
d-Limonene	CAS-No.: 5989-27-5	1.72 – 3.44	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Bergamot oil	CAS-No.: 8007-75-8	1.72 – 3.44	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Lemon oil	CAS-No.: 8008-56-8	1.58 – 3.16	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410
Cedarwood oil, Virginia	CAS-No.: 8000-27-9	1.085 – 2.17	Asp. Tox. 1, H304 Aquatic Chronic 1, H410
ACETYL HEXAMETHYL TETRALIN	CAS-No.: 21145-77-7	0.875 – 1.75	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Ecotoxicity to terrestrial vertebrates C, H433

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SECTION 4: First-aid measures	
4.1. Description of necessary first-aid measu	res
First-aid measures general :	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation :	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact :	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water.
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse eyes with water as a precaution.
First-aid measures after ingestion :	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.
4.2. Symptoms caused by exposure	
Symptoms/effects :	Not expected to present a significant hazard under anticipated conditions of normal use.
4.3. Medical attention and special treatment	
Other medical advice or treatment	Treat symptomatically.

SECTION 5: Fire-fighting measures			
5.1. Extinguishing media			
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Foam. Dry powder. Carbon dioxide. Water spray. Sand.</li><li>Do not use a heavy water stream.</li></ul>		
5.2. Specific hazards arising from the chemical			
Hazardous decomposition products in case of fire	: Toxic fumes may be released.		
5.3. Special protective equipment and prec	autions for fire-fighters		
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.		
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equ	ipment and emergency procedures	
No additional information available		
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".	
Emergency procedures	: Ventilate area.	
6.2. Environmental precautions		

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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#### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up

: Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

SECTION 7: Handling and storage	ge	
7.1. Precautions for safe handling		
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.	
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.	
Incompatible products	: Strong bases. Strong acids.	
Incompatible materials	: Sources of ignition. Direct sunlight.	
Storage temperature	: 25 °C	
Storage area	: Store in a well-ventilated place. Store away from heat.	
Special rules on packaging	: Store in a closed container.	
Packaging materials	: Do not store in corrodable metal.	

### **SECTION 8: Exposure controls and personal protection**

### 8.1. Control parameters - exposure standards

d-Limonene (5989-27-5)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	28 mg/m $^{\rm 3}$ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA) [2]	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	skin notation, Skin sensitization

#### Exposure limit values of other components

No additional information available

### 8.2. Monitoring methods

No additional information available

8.3. Engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station.
8.4. Individual protection measures, such	ch as personal protective equipment (PPE)
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses. Safety glasses
Skin and body protection	: Wear suitable protective clothing

: Wear appropriate mask

Respiratory protection

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#### Personal protective equipment symbol(s)



Environmental exposure controls Other information

- : Avoid release to the environment.
- : Do not eat, drink or smoke during use.

### **SECTION 9: Physical and chemical properties**

Physical state	: Liquid
Appearance	: No data available
Color	: light yellow amber
Odor	: characteristic
Odor threshold	: No additional information available
рН	: No additional information available
Evaporation rate	: No additional information available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point / Freezing point	: Melting point: Not applicable
Boiling point	: No data available
Flash point	: 78 °C (closed cup) ASTM D7094
Auto-ignition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapor pressure	: No additional information available
Relative density	: No additional information available
Density	: Relative density: ≈ 0.98
Solubility	: No additional information available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Explosion limits	: No additional information available
Minimum ignition energy	: No data available

### SECTION 10: Stability and reactivity

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	: Not established.
Possibility of hazardous reactions	: Not established.
Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
Incompatible materials	: Strong acids. Strong bases.
Hazardous decomposition products	: fume. Carbon monoxide. Carbon dioxide.

# SECTION 11: Transport hazard class(es)

11.1. Toxicity		
Acute toxicity (dermal)	Not classified Not classified Not classified	
Linalyl acetate (115-95-7)		
LD50 oral rat	14550 mg/kg	
LD50 dermal rabbit	> 5000 mg/kg	
Citronellol Pure (106-22-9)		
LD50 oral rat	3450 mg/kg	
LD50 oral	3450 mg/kg body weight	

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Citronellol Pure (106-22-9)	
LD50 dermal rabbit	2650 mg/kg
LD50 dermal	2650 mg/kg body weight
Linalool (78-70-6)	
LD50 oral	2790 mg/kg body weight
Ethylene brassylate (105-95-3)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
d-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg
Cedarwood oil, Virginia (8000-27-9)	
LD50 oral rat	> 5 g/kg
Bergamot oil (8007-75-8)	
LD50 oral rat	11520 mg/kg
Lemon oil (8008-56-8)	
LD50 oral rat	2840 mg/kg
ACETYL HEXAMETHYL TETRALIN (21145-7	7-7)
LD50 oral rat	570 mg/kg
LD50 oral	1000 mg/kg body weight
LD50 dermal rabbit	> 5 g/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

# SECTION 12: Document changes control

### 12.1. Ecotoxicity

Ecology - general	:	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term	:	Not classified
(acute)		
Hazardous to the aquatic environment, long-term	:	Toxic to aquatic life with long lasting effects.
(chronic)		
Soil toxicity	:	Not classified
Terrestrial vertebrate toxicity	:	Not classified
Terrestrial invertebrate toxicity	:	Not classified
Other information	:	Avoid release to the environment.

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LCS0 - Fish [1]         11 mg/l (Exposure time: 96 h - Species: Cyptimus carpio (how-through))           Partision coefficient n-octanol/water (Log Pow)         3.9 (at 25 °C)           LDS0 darmal rabbit         2.5000 mg/kg           Citronaliol Pure (106-22-9)         Partision coefficient n-octanol/water (Log Pow)           Partision coefficient n-octanol/water (Log Pow)         3.41 (at 25 °C)           LDS0 darmal rabbit         2.550 mg/kg           LDS0 darmal rabbit         2.550 mg/kg           LDS0 darmal rabbit         2.500 mg/kg           LDS0 darmal rabbit         2.5000 mg/kg           LDS0 darmal rabbit         2.5 g/kg <t< th=""><th>Linalyl acetate (115-95-7)</th><th></th></t<>	Linalyl acetate (115-95-7)	
LD60 darmal rabbit         > 6000 mg/kg           Citronellol Pure (106-22-9)            Partition coefficient n-octanol/water (Log Pow)         3.41 (at 25 °C)           LD50 darmal rabbit         2650 mg/kg           LD50 darmal rabbit         2650 mg/kg           LD50 darmal rabbit         2650 mg/kg           LD50 darmal rabbit         3450 mg/kg           Ethylene brassylate (105-95-3)            Partition coefficient n-octanol/water (Log Pow)         4.3 (at 25 °C (at pH 6.4-7)           LD50 darmal rabbit         > 6000 mg/kg           LD50 darmal rabbit         > 6 g/kg           Bargamot at (B007-75-9)            LD50 oarl rat         > 6 g/kg           Bargamot at (B007-75-8)            LD50 oarl rat         2640 mg/kg           CECTYL HEXAMETHYL TETRALIN (21145-77-7)           Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)           LD50 oarl rat         2640 mg/kg           LD50 oarl rat	LC50 - Fish [1]	11 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [flow-through])
LDS0 oral rat         14550 mg/kg           Citroneliol Pure (106-22-9)         2450 mg/kg           Partition coefficient n-octanol/water (Log Pow)         3.41 (at 25 °C)           LDS0 demail rabbit         2650 mg/kg           Ethylene brassylate (105-95-3)         2450 mg/kg           Partition coefficient n-octanol/water (Log Pow)         4.3 (at 25 °C (at pH 6.4-7)           LDS0 demail rabbit         > 5000 mg/kg           LDS0 oral rat         > 5000 mg/kg           LCS0 - Filsh (1)         0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])           LCS0 - Filsh (2)         25 mg/l (Exposure time: 96 h - Species: Dimephales promelas [flow-through])           LCS0 - Filsh (2)         25 mg/l (Exposure time: 96 h - Species: Dimephales promelas [flow-through])           LCS0 - Filsh (2)         25 mg/l (Exposure time: 96 h - Species: Dimephales promelas [flow-through])           LCS0 - Filsh (2)         25 mg/l (Exposure time: 96 h - Species: Dimephales promelas [flow-through])           LCS0 - Filsh (2)         25 mg/l (Exposure time: 96 h - Species: Dimephales promelas [flow-through])           LDS0 oral rat         25 g/kg	Partition coefficient n-octanol/water (Log Pow)	3.9 (at 25 °C)
Cirronaliol Puro (106-22-9)         Partition coefficient n-octanol/water (Log Pow)       3.41 (at 25 °C)         LD50 dermal rabbit       2650 mg/kg         LD50 oral rat       3450 mg/kg         Ethylene brassylate (105-95-3)       Partition coefficient n-octanol/water (Log Pow)       4.3 (at 25 °C (at pH 6.4-7)         LD50 oral rat       > 5000 mg/kg       Description coefficient n-octanol/water (Log Pow)       4.3 (at 25 °C (at pH 6.4-7)         LD50 oral rat       > 5000 mg/kg       Description coefficient n-octanol/water (Log Pow)       4.5 (at 25 °C (at pH 6.4-7)         LC50 - Fish (1)       0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])       LC50 - Fish (1)       0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])         LC50 - Fish (1)       0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])       LC50 - Fish (1)       0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])         LC50 - Fish (2)       35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])       LC50 - Fish (1)       0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])         LC50 - Fish (2)       35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])       LC50 - Fish (2)         LD50 oral rat       > 5 g/kg       LD50 oral rat       1520 mg/kg         LD50	LD50 dermal rabbit	> 5000 mg/kg
Partition coefficient n-octanol/water (Log Pow)         3.41 (at 25 °C)           LD50 oral rat         2850 mg/kg           Ethyleno brassylati (105-95-3)         Filleno brassylati (105-95-3)           Partition coefficient n-octanol/water (Log Pow)         4.3 (at 25 °C (at pH 6.4-7)           LD50 oral rat         > 5000 mg/kg           d-Limonene (5989-27-5)         -           LC50 - Fish [1]         0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])           LC50 - Fish [2]         35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)           Partition coefficient n-octanol/water (Log Pow)         4.38 (at 37 °C (at pH 7.2)           LD50 darmal rabbit         > 5 g/kg           LD50 darmal rabbit         > 5 g/kg           LD50 aral rat         4400 mg/kg           Cedarwood oli, Virginia (8000-27-9)         LD50 oral rat           LD50 oral rat         > 5 g/kg           LD50 oral rat         28/0 mg/kg           Lemon oil (8007-75-8)         LD50 oral rat           LD50 oral rat         28/0 mg/kg           LD50 oral rat         28/0 mg/kg           LD50 oral rat         28/0 mg/kg           LD50 oral rat         5 g/kg           LD50 oral rat         5 70 mg/kg           LD50 oral rat         5 70 mg/kg	LD50 oral rat	14550 mg/kg
LD50 dermal rabbit         2650 mg/kg           LD50 darl rat         3450 mg/kg           Ethylene brassylate (105-95-3)         Partition coefficient n-octanol/water (Log Pow)         4.3 (at 25 °C (at pH 6.4-7)           LD50 dermal rabbit         > 5000 mg/kg         Image: Comparison of Co	Citronellol Pure (106-22-9)	
LD50 oral rat     3450 mg/kg       Ethylene brassylate (105-95-3)     4.3 (at 25 °C (at pH 6.4-7)       Partition coefficient n-octanol/water (Log Pow)     4.3 (at 25 °C (at pH 6.4-7)       LD50 oral rat     > 5000 mg/kg       d-Limonene (5989-27-5)     Ethylene brassylate (100-900)       LC50 - Fish [1]     0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])       LC50 - Fish [2]     35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)       Partition coefficient n-octanol/water (Log Pow)     4.38 (at 37 °C (at pH 7.2)       LD50 dermal rabbit     > 5 g/kg       LD50 oral rat     4400 mg/kg       Cedarwood oli, Virginia (8000-27-9)     Eof oral rat       LD50 oral rat     > 5 g/kg       Berganot oli (8007-75-8)     Eof oral rat       LD50 oral rat     2840 mg/kg       ACETYL HEXAMETHYL TETRALIN (2145-77)       Partition coefficient n-octanol/water (Log Pow)     5.7 (at 24 °C)       LD50 oral rat     56 g/kg       LD50 oral rat     570 mg/kg       ILD50 oral rat     570 mg/kg       ACETYL HEXAMETHYL TETRALIN (2145-77)       Partition coefficient n-octanol/water (Log Pow)     5.7 (at 24 °C)       LD50 oral rat     570 mg/kg       ILD50 oral rat     570 mg/kg       ILD50 oral rat     570 mg/kg       ILD50 oral rat     570 mg/kg	Partition coefficient n-octanol/water (Log Pow)	3.41 (at 25 °C)
Ethylene brassylate (105-95-3)         Partition coefficient n-octanol/water (Log Pow)       4.3 (at 25 °C (at pH 6.4-7)         LD50 dermal rabbit       > 5000 mg/kg         d-Limonene (5989-27-5)	LD50 dermal rabbit	2650 mg/kg
Partition coefficient n-octanol/water (Log Pow)         4.3 (at 25 °C (at pH 6.4-7)           LD50 dermal rabbit         > 5000 mg/kg           d-Limonene (5989-27-5)	LD50 oral rat	3450 mg/kg
LD50 dermal rabbit         > 5000 mg/kg           LD50 oral rat         > 5000 mg/kg           d-Limonene (5989-27-5)         EC50 - Fish [1]         0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas (flow-through))           LC50 - Fish [2]         35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)           Partition coefficient n-octanol/water (Log Pow)         4.38 (at 37 °C (at pH 7.2)           LD50 dermal rabbit         > 5 g/kg           LD50 oral rat         4400 mg/kg           Cedarwood oil, Virginia (8000-27-9)         ED50 oral rat           LD50 oral rat         > 5 g/kg           Bergamot oil (8007-75-8)         ED50 oral rat           LD50 oral rat         > 5 g/kg           LD50 oral rat         2840 mg/kg           Cerly HEXAMETHYL TETRALIN (21145-777)           Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)           LD50 oral rat         2840 mg/kg           ACETYL HEXAMETHYL TETRALIN (21145-777)           Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)           LD50 oral rat         26 y/kg           LD50 oral rat         5 g/kg	Ethylene brassylate (105-95-3)	
LD50 oral rat         > 5000 mg/kg           d-Limonene (5989-27-5)	Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)
d-Limonene (5989-27-5)         LCS0 - Fish [1]       0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])         LCS0 - Fish [2]       35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)         Partition coefficient n-octanol/water (Log Pow)       4.38 (at 37 °C (at pH 7.2)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       4400 mg/kg         Cedarwood oil, Virginia (8000-27-9)       LD50 oral rat         LD50 oral rat       > 5 g/kg         Bergamot oil (8007-75-8)       LD50 oral rat         LD50 oral rat       11520 mg/kg         Lemon oil (8007-75-8)       LD50 oral rat         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability       > 5 g/kg         Aventois       Persistence and degradability         Aventois       Intersistence         Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Not established.         Linaly1 acetate (115-95-7)       Intersistence	LD50 dermal rabbit	> 5000 mg/kg
LCS0 - Fish [1]         0.619 - 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])           LCS0 - Fish [2]         35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)           Partition coefficient n-octanol/water (Log Pow)         4.38 (at 37 °C (at pH 7.2)           LD50 dermal rabbit         > 5 g/kg           LD50 oral rat         4400 mg/kg           Cedarwood oil, Virginia (8000-27-9)         LD50 oral rat           LD50 oral rat         > 5 g/kg           Bergamot oil (8007-75-8)         LD50 oral rat           LD50 oral rat         11520 mg/kg           LD50 oral rat         2840 mg/kg           ACETYL HEXAMETHYL TETRALIN (21145-77-7)           Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)           LD50 oral rat         2840 mg/kg           ACETYL HEXAMETHYL TETRALIN (21145-77-7)           Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)           LD50 oral rat         270 mg/kg           LD50 oral rat         570 mg/kg           L2.2. Persistence and degradability         Not established.           12.2. Persistence and degradability         Not established.           12.3. Bioaccumulative potential         Not established.           L1.alyl acetate (115-95-7)	LD50 oral rat	> 5000 mg/kg
LCS0 - Fish [2]       35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)         Partition coefficient n-octanol/water (Log Pow)       4.38 (at 37 °C (at pH 7.2)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       4400 mg/kg         Cedarwood oil, Virginia (8000-27-9)       ID50 oral rat         LD50 oral rat       > 5 g/kg         Bergamot oil (8007-75-8)       ID50 oral rat         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 oral rat       5 g/kg         LD50 oral rat       5 g/kg         LD50 oral rat       5 g/kg         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 oral rat       5 g/kg         LD50 oral rat       5 70 mg/kg         12.2. Persistence and degradability       Not established.         Aventois       Not established.         Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)       Intertable	d-Limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)     4.38 (at 37 °C (at pH 7.2)       LD50 dermal rabbit     > 5 g/kg       LD50 oral rat     4400 mg/kg       Cedarwood oil, Virginia (8000-27-9)        LD50 oral rat     > 5 g/kg       Bergamot oil (8007-75-8)        LD50 oral rat     11520 mg/kg       Lemon oil (8008-56-8)        LD50 oral rat     2840 mg/kg       ACETYL HEXAMETHYL TETRALIN (21145-77-7)       Partition coefficient n-octanol/water (Log Pow)     5.7 (at 24 °C)       LD50 oral rat     5 g/kg       LD50 oral rat     570 mg/kg       12.2. Persistence and degradability     Not established.       Aventois     Persistence and degradability       Aventois     Not established.       12.3. Bloaccumulative potential     Not established.       Linalyl acetate (115-95-7)     Not established.	LC50 - Fish [1]	0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       4400 mg/kg         Cedarwood oil, Virginia (8000-27-9)          LD50 oral rat       > 5 g/kg         Bergamot oil (8007-75-8)          LD50 oral rat       11520 mg/kg         Lemon oil (8008-56-8)          LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         AcetryL HEXAMETHYL TETRALIN (21145-77)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability       Not established.         Aventois          Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Not established.         Aventois          Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)	LC50 - Fish [2]	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LD50 oral rat     4400 mg/kg       Cedarwood oil, Virginia (8000-27-9)	Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2)
Cedarwood oil, Virginia (8000-27-9)         LD50 oral rat       > 5 g/kg         Bergamot oil (8007-75-8)         LD50 oral rat       11520 mg/kg         Lemon oil (8008-56-8)         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 oral rat       > 5 g/kg         LD50 oral rat       5 g/kg         LD50 oral rat       5 70 mg/kg         12.2. Persistence and degradability       Not established.         Aventois       Not established.         Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Not established.         Linalyi acetate (115-95-7)       Lot of the stablished.	LD50 dermal rabbit	> 5 g/kg
LD50 oral rat       > 5 g/kg         Bergamot oil (8007-75-8)       11520 mg/kg         LD50 oral rat       11520 mg/kg         Lemon oil (8008-56-8)       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)       Partition coefficient n-octanol/water (Log Pow)         5.7 (at 24 °C)       11520 mg/kg         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability       Not estabilshed.         Persistence and degradability       Not estabilshed.         12.3. Bioaccumulative potential       Not estabilshed.         Linalyl acetate (115-95-7)       Intervential	LD50 oral rat	4400 mg/kg
Bergamot oil (8007-75-8)         LD50 oral rat       11520 mg/kg         Lemon oil (8008-56-8)         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         ILD50 oral rat       570 mg/kg         IL2.2. Persistence and degradability       Not established.         IL2.3. Bioaccumulative potential       Not established.         IL3.3. Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)       Intervential	Cedarwood oil, Virginia (8000-27-9)	
LD50 oral rat       11520 mg/kg         Lemon oil (8008-56-8)       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)       Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg       1500 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg       12.2. Persistence and degradability         Aventois       Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Not established.       11.3.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	LD50 oral rat	> 5 g/kg
Lemon oil (8008-56-8)         LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability         Aventois         Persistence and degradability         Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential         Not established.	Bergamot oil (8007-75-8)	
LD50 oral rat       2840 mg/kg         ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability         Aventois         Persistence and degradability         Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential         Not established.         LinalyI acetate (115-95-7)	LD50 oral rat	11520 mg/kg
ACETYL HEXAMETHYL TETRALIN (21145-77-7)         Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability         Aventois         Persistence and degradability         Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential         Not established.         Linalyl acetate (115-95-7)	Lemon oil (8008-56-8)	
Partition coefficient n-octanol/water (Log Pow)       5.7 (at 24 °C)         LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability         Aventois         Persistence and degradability         Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential         Not established.         Linalyl acetate (115-95-7)	LD50 oral rat	2840 mg/kg
LD50 dermal rabbit       > 5 g/kg         LD50 oral rat       570 mg/kg         12.2. Persistence and degradability         Aventois         Persistence and degradability       Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)	ACETYL HEXAMETHYL TETRALIN (21145-77-	7)
LD50 oral rat     570 mg/kg       12.2. Persistence and degradability     12.2. Persistence and degradability       Aventois     Persistence and degradability       Not established.     12.3. Bioaccumulative potential       Aventois     Bioaccumulative potential       Aventois     Not established.       Linalyl acetate (115-95-7)     Image: Comparison of the stablished.	Partition coefficient n-octanol/water (Log Pow)	5.7 (at 24 °C)
12.2. Persistence and degradability         Aventois         Persistence and degradability       Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential         Not established.         Linalyl acetate (115-95-7)	LD50 dermal rabbit	> 5 g/kg
Aventois         Persistence and degradability       Not established.         12.3. Bioaccumulative potential         Aventois         Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)	LD50 oral rat	570 mg/kg
Persistence and degradability       Not established.         12.3. Bioaccumulative potential       Aventois         Bioaccumulative potential       Not established.         Linalyl acetate (115-95-7)       Image: Comparison of Comparis	12.2. Persistence and degradability	
12.3. Bioaccumulative potential       Aventois       Bioaccumulative potential       Not established.       Linalyl acetate (115-95-7)	Aventois	
Aventois         Bioaccumulative potential         Not established.	Persistence and degradability	Not established.
Bioaccumulative potential     Not established.       Linalyl acetate (115-95-7)	12.3. Bioaccumulative potential	
Linalyl acetate (115-95-7)	Aventois	
	Bioaccumulative potential	Not established.
Partition coefficient n-octanol/water (Log Pow) 3.9 (at 25 °C)	Linalyl acetate (115-95-7)	
	Partition coefficient n-octanol/water (Log Pow)	3.9 (at 25 °C)

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Citronellol Pure (106-22-9)	
Partition coefficient n-octanol/water (Log Pow)	3.41 (at 25 °C)
Ethylene brassylate (105-95-3)	
Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)
d-Limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2)
ACETYL HEXAMETHYL TETRALIN (21145-77-7)	
Partition coefficient n-octanol/water (Log Pow)	5.7 (at 24 °C)

### 12.4. Mobility in soil

Aventois	
Mobility in soil	No additional information available
Linalyl acetate (115-95-7)	
Partition coefficient n-octanol/water (Log Pow)	3.9 (at 25 °C)
Citronellol Pure (106-22-9)	
Partition coefficient n-octanol/water (Log Pow)	3.41 (at 25 °C)
Ethylene brassylate (105-95-3)	
Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)
d-Limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2)
ACETYL HEXAMETHYL TETRALIN (21145-77-	7)
Partition coefficient n-octanol/water (Log Pow)	5.7 (at 24 °C)
12.5. Other adverse effects	

#### Ozone

Other adverse effects

: Not classified : No additional information available

SECTION 13: Disposal consideration	s
Waste treatment methods Product/Packaging disposal recommendations Ecology - waste materials	<ul> <li>Dispose of contents/container in accordance with licensed collector's sorting instructions.</li> <li>Dispose in a safe manner in accordance with local/national regulations.</li> <li>Avoid release to the environment.</li> </ul>

SECTION 14: Transport informatio	n
14.1. UN number	
UN-No.(UN RTDG) UN-No. (IMDG) UN-No. (IATA)	: 3082 : 3082 : 3082
14.2. UN proper shipping name	
Proper Shipping Name (UN RTDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	<ul> <li>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene)</li> <li>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (d-Limonene)</li> <li>Environmentally hazardous substance, liquid, n.o.s. (d-Limonene)</li> </ul>

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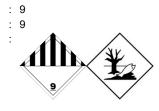
### 14.3. Transport hazard class(es)

### UN RTDG

Transport hazard class(es) (UN RTDG) Hazard labels (UN RTDG)



#### IMDG Transport hazard class(es) (IMDG) Hazard labels (IMDG)



#### ΙΑΤΑ

44.4 Dookin

Transport hazard class(es) (IATA) Hazard labels (IATA)

:	9
:	9
:	

14.4. Packing group	
Packing group (UN RTDG) Packing group (IMDG) Packing group (IATA)	: III : III : III
14.5. Emergency telephone number	
Dangerous for the environment Marine pollutant Other information	<ul> <li>True</li> <li>Yes</li> <li>No supplementary information available</li> </ul>
14.6. Special precautions for user	
Transport by road and rail Special provision (UN RTDG) Limited quantities (UN RTDG) Excepted quantities (UN RTDG) Packing instruction (UN RTDG) Special packing provisions (UN RTDG) Portable tank and bulk container special instructions (UN RTDG) Portable tank and bulk container special provisions (UN RTDG)	<ul> <li>274, 331, 335, 375</li> <li>5L</li> <li>E1</li> <li>P001, IBC03, LP01</li> <li>PP1</li> <li>T4</li> <li>TP1, TP29</li> </ul>
Transport by sea Special provision (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG) Packing instructions (IMDG) Packing provisions (IMDG) IBC packing instructions (IMDG) Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage)	<ul> <li>274, 335, 969</li> <li>5 L</li> <li>E1</li> <li>LP01, P001</li> <li>PP1</li> <li>IBC03</li> <li>T4</li> <li>TP1, TP29</li> <li>F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE</li> <li>S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS</li> </ul>

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Stowage category (IMDG)	: A
Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provision (IATA) ERG code (IATA)	: E1 : Y964 : 30kgG : 964 : 450L : 964 : 450L : A97, A158, A197, A215 : 9L

14.7. Transport in bulk according to IMO instruments

Not applicable

14.8. Hazchem or Emergency Action Code

Not applicable

### **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Linalyl acetate (115-95-7)

Hazardous Substances and New Organisms Act	
HSNO Approval Number	HSR003499

Citronellol Pure (106-22-9)

HSNO Approval Number HSR003483	

Linalool (78-70-6)		
Hazardous Substances and New Organisms Act		
HSNO Approval Number	HSR003500	

d-Limonene (5989-27-5)		
Hazardous Substances and New Organisms Act		
HSNO Approval Number	HSR002725	

Cedarwood oil, Virginia (8000-27-9)		
Hazardous Substances and New Organisms Act		
HSNO Approval Number	HSR003855	
Lemon oil (8008-56-8)		
Hazardous Substances and New Organisms Act		
HSNO Approval Number	HSR003520	

### 15.2. Chemical safety assessment

No additional information available

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according to the Hazardous Substances and New Organisms Act (1996)

SECTION 16: Other information		
Issue date :	7/11/2022	
Other information :	None.	
Full text of H-phrases		
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard Category 2	
Asp. Tox. 1	Aspiration hazard Category 1	
Ecotoxicity to terrestrial vertebrates C	Ecotoxicity to terrestrial vertebrates C	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids Category 3	
Flam. Liq. 4	Flammable liquids Category 4	
Skin Irrit. 2	Skin corrosion/irritation Category 2	
Skin Sens. 1	Skin sensitization, Category 1	
H226	Flammable liquid and vapour	
H227	Combustible liquid	
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	
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	
H433	Harmful to terrestrial vertebrates	

Safety Data Sheet (SDS), New Zealand

The data contained in this Safety Data Sheet is accurate to the best knowledge of Zen Aroma applies to the product as supplied by Zen Aroma and does not relate to use in combination with any other material or in any process. Data and information is furnished without warranty expressed or implied, nor does Zen Aroma assume responsibility for use or reliance upon this data.

This SDS is current to the date listed above. However, the GHS classifications may change due to hazard communication updates by the overseeing governing body. For the most current SDS information please contact support@zenaroma.co.nz