

## 1. IDENTIFICATION

**Product Name:** Starfruit Lemonade Fragrance  
**Other Names:**  
**Product Use Description:** Fragrance for Consumer Product  
**Contact Information:**

Organisation	Location	Telephone	Ask For
Adelaide Moulding and Candle Supplies	7 Woodlands Terrace Edwardstown, South Australia, 5039	08 8294 0451	SDS Officer
Poisons Information Centre		13 11 26	

## 2. HAZARD IDENTIFICATION

**Classification of Substance:** Eye Irritation Category 2  
Skin Sensitisation Category 1  
Long-term (chronic) aquatic hazard, Category 2  
H319, Causes serious eye irritation.  
H317, May cause an allergic skin reaction.  
H411, Toxic to aquatic life with long lasting effects.

**Hazard Pictogram(s):**



**Signal Word:** WARNING

**Hazard Statements (s):** H317, May cause an allergic skin reaction.  
H319, Causes serious eye irritation.  
H411, Toxic to aquatic life with long lasting effects.

**Precautionary Statements(s):** **Prevention:**  
P261, Avoid breathing vapour or dust.  
P273, Avoid release to the environment.  
P280, Wear protective gloves/eye protection/face protection.

**Response:**  
P333/313, If skin irritation or rash occurs: Get medical advice/attention.  
P337/313, If eye irritation persists: Get medical advice/attention  
P391, Collect spillage.

**Hazardous component which must be listed on the label:** Linalyl acetate  
(R)-p-mentha-1,8-diene; d-limonene  
Benzyl salicylate  
Cyclohexanepropanoic acid, 2-propen-1-yl ester  
3-p-Cumenyl-2-methylpropionaldehyde  
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde  
Citronellol  
4-(4-hydroxy-4-methylpentyl)cyclohex-3-ene-1-carbaldehyde

**Other Hazards:** This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixtures:

EC No	CAS No	Description	GHS Classification	Concentration (%w/w)
88-41-5	20298-69-5	cis-2-tert-Butylcyclohexyl acetate	Aquatic Chronic 2; H411	>= 10 - < 20
203-305-9	105-53-3	Diethyl malonate	Eye Irrit. 2; H319	>= 1 - < 10
204-116-4	115-95-7	Linalyl acetate	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1B; H317	>= 1 - < 10
204-263-4	118-60-5	2-Ethylhexyl salicylate	Aquatic Chronic 1; H410 M-Factor (Chronic aquatic toxicity): 1	>= 2,5 - < 10
227-813-5	5989-27-5	(R)-p-mentha-1,8-diene; d-limonene	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Skin Sens. 1B; H317 Asp. Tox. 1; H304 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2,5
272-805-7	68912-13-0	3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-indenyl propionate	Aquatic Chronic 2; H411	>= 1 - < 2,5
204-640-3	123-66-0	Ethyl hexanoate	Flam. Liq. 3; H226 Skin Irrit. 2; H315	>= 1 - < 10
201-224-3	79-77-6	(E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one	Aquatic Chronic 2; H411	>= 1 - < 2,5
204-262-9	118-58-1	Benzyl salicylate	Eye Irrit. 2; H319 Skin Sens. 1B; H317 Aquatic Chronic 3; H412	>= 1 - < 2,5
205-399-7	140-11-4	Benzyl acetate	Aquatic Chronic 3; H412	>= 1 - < 2,5
204-642-4	123-68-2	Allyl hexanoate	Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Aquatic Acute 1; H400 Aquatic Chronic 3; H412 M-Factor (Acute aquatic toxicity): 1	>= 0,25 - < 1
220-292-5	2705-87-5	Cyclohexanepropanoic acid, 2-propen-1-yl ester	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0,25 - < 1
203-161-7	103-95-7	3-p-Cumenyl-2-methylpropionaldehyde	Skin Irrit. 2; H315 Skin Sens. 1B; H317 Aquatic Chronic 3; H412	>= 0,25 - < 1
268-264-1	68039-49-6 68039-48-5	2,4-Dimethylcyclohex-3-ene-1-carbaldehyde	Skin Irrit. 2; H315 Skin Sens. 1; H317 Aquatic Chronic 2; H411	>= 0,25 - < 1
279-815-0	81782-77-6	4-Methyl-3-decen-5-ol	Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M-Factor (Acute aquatic toxicity): 1	>= 0,25 - < 1
266-803-5	67634-00-8	Allyl (3-methylbutoxy)acetate	Acute Tox. 4; H302 Acute Tox. 2; H330 Skin Irrit. 2; H315	>= 0,1 - < 1
203-375-0	106-22-9	Citronellol	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Skin Sens. 1B; H317	>= 0,1 - < 1
250-863-4	31906-04-4	4-(4-hydroxy-4-methylpentyl)cyclohex-3-ene-1-carbaldehyde	Skin Sens. 1A; H317	< 0,1

#### Substances with Community workplace exposure limits, not listed above:

Name	CAS	EC	%
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(2-Methoxymethylethoxy) propanol	34590-94-8	252-104-2	>= 30 - < 50
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#### 4. FIRST AID MEASURES

<b>General advice:</b>	Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
<b>Protection of first aiders:</b>	First Aid responders should pay attention to self-protection and use the recommended protective clothing
<b>Skin Contact:</b>	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
<b>Eye Contact:</b>	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
<b>Swallowed:</b>	Rinse mouth with water. Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
<b>Most important symptoms and effects:</b>	May cause an allergic skin reaction. Causes serious eye irritation. First aider needs to protect himself.
<b>Indication of any immediate Medical attention and special treatment needed:</b>	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine. There is no specific antidote available.

#### 5. FIRE FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
<b>Unsuitable extinguishing media:</b>	High volume water jet
<b>Hazardous Combustion Products:</b>	No hazardous combustion products are known.
<b>Advice for Fire Fighters:</b>	Special protective equipment in the event of fire, wear self-contained breathing apparatus. In the event of fire and/or explosion do not breathe fumes. Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions and Protective Equipment:</b>	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental Precautions:</b>	Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. If the product contaminates river and lakes or drains inform respective authorities.
<b>Methods and Suitable materials for containment and cleaning up:</b>	Soak up with inert absorbent material (sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, close container for disposal.

#### 7. HANDLING AND STORAGE

<b>Safe Handling Precautions:</b>	Avoid formation of aerosol. For personal protection see section 8. Smoking, eating, and drinking should be prohibited in the application areas. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national regulations. Normal measures for preventive fire protection. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.
<b>Storage conditions:</b>	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Electrical installation/working material must comply with the technological safety standards. No special restriction on storage with other products. Storage class (TRGS 510) 10, combustible liquids. No decomposition if stored and applied as directed.

Specific end use(s): Fragrance mix.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace exposure limits:

Ingredient	CAS	Value type (Form of exposure)	Control parameters	Basis
(2-Methoxymethylethoxy)propanol	34590-94-8	MAK (vapour)	50 ppm 310 mg/m <sup>3</sup>	DFG
		TWA	50 ppm 308 mg/m <sup>3</sup>	91/322/EEC
		TWA	50 ppm 308 mg/m <sup>3</sup>	EU SCOEL
		AGW (Vapor and aerosol)	50 ppm 310 mg/m <sup>3</sup>	DE TRGS 900
Further information: Sum of vapours and aerosols				
(R)-p-mentha-1,8-diene; d-limonene	5989-27-5	MAK	5 ppm 28 mg/m <sup>3</sup>	DFG
		AGW	5 ppm 28mg/m <sup>3</sup>	DE TRGS 900

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006

Substance name	End Use	Exposure routes	Potential health effects	Value
<b>Citronellol</b>	Workers	Inhalation	Long-term systemic effect	161,6 mg/m <sup>3</sup>
	Workers	Inhalation	Long-term local effects	10 mg/m <sup>3</sup>
	Workers	Inhalation	Acute local effects	10mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effect	327.4 mg/kg/bw/day
	Workers	Skin contact	Acute local effects	2.95 mg/cm <sup>2</sup>
	Consumers	Skin contact	Acute local effects	2.95mg/cm <sup>2</sup>
	Consumers	Skin contact	Long-term systemic effect	196,4 mg/kg/bw/day
	Consumers	Inhalation	Acute local effects	10mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term local effects	10mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term systemic effect	47,8mg/m <sup>3</sup>
<b>Allyl hexanoate</b>	Workers	Inhalation	Long-term systemic effect	15mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effect	4,3mg/kg/bw/day
	Consumers	Inhalation	Long-term systemic effect	3.7mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effect	2,1mg/kg/bw/day
	Consumers	Ingestion	Long-term systemic effect	2,1mg/kg/bw/day
<b>Cyclohexanepropano-1c acid, 2-propen-1-yl ester</b>	Workers	Inhalation	Long-term systemic effect	15mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effect	4,3mg/kg/bw/day
	Consumers	Inhalation	Long-term systemic effect	3,7mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effect	2,1mg/kg/bw/day
	Consumers	Ingestion	Long-term systemic effect	2,1mg/kg/bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No.1907/2006:

Substance name	Environmental Compartment	Value
Citronellol	Fresh water	0,002 mg/l
	Fresh water sediment	0,026 mg/kg dry weight (d.w.)
	Marine water	0,00024 mg/l
	Marine sediment	0,003 mg/kg dry weight (d.w.)
	Sewage treatment plant	580 mg/l
	Soil	0,004 mg/kg dry weight (d.w.)
Allyl hexanoate	Fresh water	0,000117 mg/l
	Fresh water sediment	0,00446 mg/kg dry weight (d.w.)
	Marine water	0,000012 mg/l
	Marine sediment	0,000446 mg/kg dry weight (d.w.)
	Sewage treatment plant	10 mg/l
	Soil	0,000825 mg/kg dry weight (d.w.)

Cyclohexanepropanoic acid, 2-propen-1-yl ester	Fresh water	0,00013 mg/l
	Fresh water sediment	0,02413 mg/kg dry weight (d.w.)
	Marine water	0,000013 mg/l
	Marine sediment	0,002413 mg/kg dry weight (d.w.)
	Sewage treatment plant	0,2 mg/l
	Soil	0,00475 mg/kg dry weight (d.w.)

#### Exposure Controls

##### Eye protection

Eye was bottle with pure water.  
Tightly fitting safety goggles.  
Wear face-shield and protective suit for abnormal processing problems.

##### Hand protection

Take note of the information given by the producer concerning permeability and break through times, and of

##### Remarks:

special workplace conditions (mechanical strain, duration of contact). As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use. Wear chemicals-resistant gloves, e.g. safety gloves of nitril (thickness 0.4mm) or of butyl rubber (thickness 0.7mm).

##### Skin and body protection

Impervious clothing. Choose body protection according to the amount and concentration of the dangerous substance at the work place.

##### Respiratory protection

Not required, except in case of aerosol formation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Clear liquid
<b>Colour:</b>	Colourless to yellow
<b>Aroma/Odour:</b>	Characteristic
<b>Odour threshold:</b>	No data available
<b>Melting point/freezing point:</b>	Not determined
<b>Boiling point/boiling range:</b>	Not determined
<b>Upper explosion limit / upper flammability limit:</b>	Vapours many form explosive mixtures with air
<b>Lower explosion limit/ Lower flammability limit:</b>	Vapours may form explosive mixtures with air
<b>Flash point:</b>	76 °C
<b>Decomposition temperature:</b>	Not determined
<b>pH:</b>	Not applicable
<b>Viscosity:</b>	
<b>Dynamic</b>	Not determined
<b>Kinematic</b>	Not determined
<b>Solubility (ies)</b>	
<b>Water solubility:</b>	Immiscible
<b>Partition coefficient:</b>	
<b>n-octanol/water</b>	Not applicable
<b>Vapour pressure:</b>	1 kPa (50 °C)
<b>Relative density:</b>	Not determined
<b>Bulk density:</b>	Not applicable
<b>Relative vapour density:</b>	Not determined

#### Other information

<b>Explosives:</b>	Due to its structural properties, the product is not classified as explosive
<b>Oxidizing properties:</b>	The substance or mixture is not classified as oxidizing
<b>Self-ignition:</b>	The substance or mixture is not classified as self heating.
<b>Evaporation rate:</b>	Not applicable
<b>Molecular weight:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

**Reactivity Hazards:** No decomposition if stored and applied as directed.

**Chemical Stability:** No decomposition if stored and applied as directed.

<b>Hazardous Reactions:</b>	No decomposition if stored and applied as directed. Vapours may form explosive mixture with air.
<b>Conditions to Avoid:</b>	No data available.
<b>Incompatibles:</b>	No data available
<b>Hazardous Decomposition Products:</b>	No hazardous decomposition products are known.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute toxicity:</b>	Not classified based on available information.
<b>Acute oral toxicity:</b>	Acute toxicity estimate: >2.000 mg/kg Method: Calculation method
<b>Acute inhalation toxicity:</b>	Acute toxicity estimate: >5mg/l Exposure: 4h Test atmosphere: dust/mist Method: Calculation method
<b>Acute dermal toxicity:</b>	Acute toxicity estimate: >2.000 mg/kg Method: Calculation method

### Information on other hazards

<b>Endocrine disrupting properties:</b>	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
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## 12. ECOLOGICAL INFORMATION

<b>Toxicity:</b>	Very toxic to aquatic life with long lasting effects.
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### Persistence and Degradability Components:

<b>cis-2-tert-Butylcyclohexyl acetate:</b> Biodegradability	Test Type: Manometric respiration test Result: Inherently biodegradable. Biodegradation: 61 % Exposure time: 60 d Method: OECD 301F GLP: yes
<b>Diethyl malonate:</b> Biodegradability	Test Type: Manometric respiration test Result: Readily biodegradable. Biodegradation: 100 % Exposure time: 28 d Method: OECD 301F GLP: yes
<b>Linalyl acetate:</b> Biodegradability	Test Type: Manometric respiration test Result: Readily biodegradable. Biodegradation: 76 % Exposure time: 28 d Method: OECD 301F GLP: no
<b>2-Ethylhexyl salicylate:</b> Biodegradability	Test Type: CO2 Evolution Test Result: Readily biodegradable. Biodegradation: 71 % Exposure time: 28 d Method: OECD 301B GLP: yes
<b>3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-indenyl</b>	Test Type: MITI Test II Result: Partially inherently biodegradable.

<b>propionate:</b> Biodegradability	Biodegradation: 20 % Exposure time: 28 d Method: OECD 302C GLP: yes
<b>Ethyl hexanoate:</b> Biodegradability	Test Type: Manometric respiration test Result: Readily biodegradable. Biodegradation: 79 % Exposure time: 28 d Method: OECD 301F GLP: yes
<b>(E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one:</b> Biodegradability	Test Type: OECD 301F Inoculum: activated sludge Concentration: 50 mg/l Result: Readily biodegradable. Biodegradation: 70 - 80 % Exposure time: 28 d GLP: no
<b>Benzyl salicylate:</b> Biodegradability	Type: Manometric respiration test Result: Readily biodegradable. Biodegradation: 93 % Exposure time: 28 d Method: OECD 301F GLP: yes
<b>Benzyl acetate:</b> Biodegradability	Test Type: Sturm test, OECD 301-B, (CO <sub>2</sub> ): Result: Readily biodegradable. Biodegradation: 100 % Exposure time: 28 d Method: OECD Test Guideline 301B GLP: no
<b>Allyl hexanoate:</b> Biodegradability	Test Type: Manometric Respirometry Test Result: Readily biodegradable. Biodegradation: 70 % Exposure time: 28 d Method: OECD 301F GLP: yes
<b>Cyclohexanepropanoic acid, 2-propen-1-yl ester:</b> Biodegradability	Test Type: Closed Bottle test Result: Readily biodegradable. Biodegradation: 86 % Exposure time: 28 d Method: OECD 301D GLP: yes
<b>3-p-Cumenyl-2-methylpropionaldehyde:</b> Biodegradability	Test Type: CO <sub>2</sub> Evolution Test Result: Readily biodegradable. Biodegradation: 66 % Exposure time: 28 d Method: OECD 301B GLP: No information available.
<b>2,4-Dimethylcyclohex-3-ene-1-carbaldehyde:</b> Biodegradability	Test Type: MITI Test I Result: Not readily biodegradable. Biodegradation: 0 % Exposure time: 28 d Method: OECD 301C GLP: yes
<b>4-Methyl-3-decen-5-ol:</b> Biodegradability	Test Type: Manometric respiration test Result: Readily biodegradable. Biodegradation: 73 % Exposure time: 28 d Method: OECD 301F GLP: yes

**Allyl (3-methylbutoxy)acetate:** Test Type: Sturm test, OECD 301-B, (CO<sub>2</sub>):  
Biodegradability Result: Readily biodegradable.  
Biodegradation: 89,1 %  
Exposure time: 28 d  
Method: OECD 301B  
GLP: no

**Citronellol:** Test Type: aerobic  
Biodegradability Inoculum: activated sludge  
Result: Readily biodegradable.  
Biodegradation: 80 - 90 %  
Exposure time: 28 d  
GLP: no

**4-(4-hydroxy-4-methylpentyl)cyclohex-3-ene-1-carbaldehyde:** Test Type: Closed Bottle test  
Biodegradability Result: Readily biodegradable.  
Biodegradation: 63 %  
Exposure time: 28 d  
Method: OECD 301D  
GLP: yes

**(2-Methoxymethylethoxy)propanol:** Test Type: Manometric respiration test  
Biodegradability Result: Readily biodegradable.  
Biodegradation: 96 %  
Exposure time: 28 d  
Method: OECD 301F  
GLP: yes

**Bioaccumulative potential:**

**cis-2-tert-Butylcyclohexyl acetate:** log Pow: 4,8 (25 °C)  
pH: 7  
Partition coefficient: Method: OECD 117  
n-octanol/water GLP: yes

**Diethyl malonate:** log Pow: 0,96  
Partition coefficient: Method: OECD Test Guideline 107  
n-octanol/water

**Linalyl acetate:** log Pow: 3,9 (25 °C)  
Partition coefficient: Method: OECD Test Guideline 107  
n-octanol/water GLP: yes

**2-Ethylhexyl salicylate:** log Pow: 5,94 (25 °C)  
Partition coefficient: pH: 7,8  
n-octanol/water Method: OECD Test Guideline 123  
GLP: yes

**3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-indenyl propionate:**

Partition coefficient: log Pow: 3,34  
n-octanol/water Remarks: calculated

**Ethyl hexanoate:** log Pow: 2,96 (22,4 °C)  
Partition coefficient: Method: OECD 117  
n-octanol/water GLP: yes

**(E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one:**

Partition coefficient: Pow: 4 (25 °C)  
n-octanol/water

**Benzyl salicylate:** log Pow: 4,0 (35 °C)  
Partition coefficient: Method: OECD 117  
n-octanol/water GLP: yes

**Benzyl acetate:** log Pow: 1,96 (25 °C)  
pH: 7

**Allyl hexanoate:** Bioconcentration factor (BCF): 102,3  
Bioaccumulation Remarks: calculated



**Partition coefficient:** log Pow: 3,191 (20 °C)  
n-octanol/water Method: OECD Test Guideline 107  
GLP: yes

**Cyclohexanepropanoic acid, 2-propen-1-yl ester:**

Partition coefficient: log Pow: 4,28 (20 °C)  
n-octanol/water Method: OECD Test Guideline 107  
GLP: yes

**3-p-Cumenyl-2-methylpropionaldehyde:**

Partition coefficient: log Pow: 3,4 (35 °C)  
n-octanol/water Method: OECD 117  
GLP: yes

**2,4-Dimethylcyclohex-3-ene-1-carbaldehyde:**

Partition coefficient: log Pow: 2,7 (25 °C)  
n-octanol/water Method: OECD Test Guideline 117  
GLP: yes

**4-Methyl-3-decen-5-ol:**

Partition coefficient: log Pow: 3,9 (30 °C)  
n-octanol/water pH: 7  
Method: OECD 117  
GLP: yes

**Allyl (3-methylbutoxy)acetate:**

Partition coefficient: log Pow: 2,34  
n-octanol/water Remarks: calculated

**Citronellol:**

Bioaccumulation: Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

Partition coefficient: log Pow: 3,41 (25 °C)  
n-octanol/water GLP: no

**4-(4-hydroxy-4-methylpentyl)cyclohex-3-ene-1-carbaldehyde:**

Partition coefficient: log Pow: 3,3  
n-octanol/water Remarks: calculated  
log Pow: 3,32  
Remarks: calculated

**(2-Methoxymethylethoxy) propanol:**

Partition coefficient: log Pow: 1,01  
n-octanol/water

**Mobility in soil:**

**Benzyl salicylate:** Adsorption/Soil  
Distribution among Medium: Soil  
environ-mental compartments log Koc: 3,75  
Method: OECD 121

**Allyl hexanoate:** log Koc: 2,53  
Distribution among Remarks: calculated  
environ-mental compartments

**Cyclohexanepropanoic acid, 2-propen-1-yl ester:**

Distribution among log Koc: 3,26  
environ-mental compartments Remarks: calculated

**2,4-Dimethylcyclohex-3-ene-1-carbaldehyde:**

Distribution among Adsorption/Soil  
environ-mental compartments Medium: Soil  
log Koc: 2,2  
Method: OECD 121

**PBT and vPvB Assessment**

**Product:** This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

**Components:**

**Allyl hexanoate:** This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Cyclohexanepropanoic acid, 2-propen-1-yl ester:** This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Endocrine disrupting properties:**

**Product:** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Other Adverse Effects****Product:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**Components:****cis-2-tert-Butylcyclohexyl acetate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**Diethyl malonate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**2-Ethylhexyl salicylate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

**3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-indenyl propionate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**Benzyl salicylate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

**Benzyl acetate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

**Allyl hexanoate:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.

**Cyclohexanepropanoic acid, 2-propen-1-yl ester:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

**2,4-Dimethylcyclohex-3-ene-1-carbaldehyde:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting effects.

**4-Methyl-3-decen-5-ol:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects.

**Citronellol:**

Additional ecological information: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods:** The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways, or ditches with chemical or used container. Send to a licensed waste management company.

**Contaminated packaging:** Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

## 14. TRANSPORT INFORMATION

**UN Number:** UN3082

**UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ETHYLHEXYL SALICYLATE,LIMONENE)

**Transport Hazard Class(es):** 9

**Packing Group:**

**Packing group** III

**Classification code** M6

**Hazard identification number** 90

**Labels** 9

**Tunnel restriction code** (-)

**Environmental Hazards:** This is an environmentally hazardous substance.

**Special Precautions for user:** The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

**Maritime transport in bulk according to IMO instruments:** Not Applicable for product as supplied.

## 15. REGULATORY INFORMATION

**Safety, Health and Environmental Regulations Specific for the substance or mixture.**

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations, and articles (Annex XVII):  
Conditions of restriction for the following entries should be considered:

Number on list 3  
Orange, sweet, ext. (Number on list 40, 3)  
4-Methyl-3-decen-5-ol (Number on list 3)  
2,4-Dimethylcyclohex-3-ene-1-carbaldehyde (Number on list 3)  
Citronellol (Number on list 3)  
isopentyl acetate (Number on list 40, 3)  
3-p-Cumenyl-2-methylpropionaldehyde (Number on list 3)  
3a,4,5,6,7,7a-Hexahydro-4,7-methano-1H-indenyl propionate (Number on list 3)  
Allyl (3-methylbutoxy)acetate (Number on list 3)  
2,2,5-Trimethyl-5-pentylcyclopentan-1-one (Number on list 3)  
(E)-4-(2,6,6-Trimethyl-1-cyclohexen-1-yl)-3-buten-2-one (Number on list 3)  
2-Ethylhexyl salicylate (Number on list 3)  
Diethyl malonate (Number on list 3)  
3,4,4a,5,8,8a-Hexahydro-3',7'-dimethylspiro[1,4-methanonaphthalene-2(1H),2'-oxirane] (Number on list 3)  
Allyl hexanoate (Number on list 3)  
Ethyl hexanoate (Number on list 40, 3)  
Ethyl 2-methylbutyrate (Number on list 40, 3)  
Benzyl acetate (Number on list 3)  
Benzyl salicylate (Number on list 3)  
Cyclohexanepropanoic acid, 2-propen-1-yl ester (Number on list 3)  
Linalyl acetate (Number on list 3)  
Pentyl butyrate (Number on list 3)

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable

REACH - List of substances subject to authorisation (Annex XIV): Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		<b>Quantity 1</b>	<b>Quantity 2</b>
E2	ENVIRONMENTAL HAZARDS	200t	500t

<b>Water hazard class (Germany):</b>	WGK 2 obviously hazardous to water Classification according to AwSV, Annex 1 (5.2)
<b>TA Luft List (Germany):</b>	Total dust: Not applicable Inorganic substances in powdered form: Not applicable Organic Substances: portion Class 1: 1,21 % Carcinogenic substances: Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable
<b>Volatile organic compounds:</b>	Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control). Volatile organic compounds (VOC) content: 67,22 %
<b>Other regulations:</b>	Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.
<b>Chemical safety assessment:</b>	A Chemical Safety Assessment is not required for this substance.

## 16. OTHER INFORMATION

### Further Information

Abbreviation	Meaning
Acute Tox.	Acute toxicity
Aquatic Acute	Short-term (acute) aquatic hazard
Aquatic Chronic	Long-term (chronic) aquatic hazard
Asp. Tox.	Aspiration hazard
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation
91/322/EEC	Europe. Commission Directive 91/322/EEC on establishing indicative limit values
DE TRGS 900	Germany. TRGS 900 - Occupational exposure limit values.
DFG	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).
EU SCOEL	EU. Scientific Committee on Occupational Exposure Limit Values (SCOELs), European Commission - SCOEL, as amended
91/322/EEC / TWA	Time weighted average
DE TRGS 900 / AGW	Exposure limit(s):
DFG / MAK	Maximum allowable concentration:
EU SCOEL / TWA	Time weighted average
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
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.

**Further information**

Classification of mixture		Classification Procedure
Eye Isst.2	H319	Calculation method
Skin Sens.1	H317	Calculation method
Aquatic Chronic 2	H411	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.