

FRESH PINEAPPLE CC-16437

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 9/20/2022



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

1.1. Product identifier

Product form : Mixture
Product name : FRESH PINEAPPLE CC-16437
UFI : 0D1D-E3AA-T00X-E49X
Product code : CC-16437
Type of product : Perfumes, fragrances
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use
Industrial/Professional use spec : Industrial
For professional use only
Use of the substance/mixture : Perfumes, fragrances
Function or use category : Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Candle Craft
Weiherwiese 10
65510 Idstein - Germany
T 49-6126-9363 -0
info@candlecraft.de - www.candlecraft.de

1.4. Emergency telephone number

Emergency number : 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731;
Brazil: +0-800-591-6042; India: +000-800-100-4086

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1 H317

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

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

GHS09

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Signal word (CLP)	: Warning
Contains	: Hexyl cinnamic aldehyde, Allyl cyclohexylpropionate, Aldehyde C-16, Methyl cinnamate, trans-Anethole, d-Limonene, Triplal (Vertocitral), Acetate PA
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. P302+P352 - IF ON SKIN: Wash with plenty of water. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	1.9 – 3.8	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Allyl cyclohexylpropionate	CAS-No.: 2705-87-5 EC-No.: 220-292-5	1.5 – 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Aldehyde C-16	CAS-No.: 77-83-8 EC-No.: 201-061-8 REACH-no: 01-2119967770-28	1.3 – 2.6	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Allyl heptanoate	CAS-No.: 142-19-8 EC-No.: 205-527-1 REACH-no: 01-2119488961-23	1 – 2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Methyl cinnamate	CAS-No.: 103-26-4 EC-No.: 203-093-8 REACH-no: 01-2119979458-16	0.9 – 1.7	Skin Sens. 1B, H317
Allyl amyl glycolate	CAS-No.: 67634-00-8 EC-No.: 266-803-5	0.7 – 1.4	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Acute Tox. 2 (Inhalation), H330

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Isoamyl acetate substance with a Community workplace exposure limit	CAS-No.: 123-92-2 EC-No.: 204-662-3 EC Index-No.: 607-130-00-2 REACH-no: 01-2119548408-32	0.6 – 1.2	Flam. Liq. 3, H226
Allyl caproate	CAS-No.: 123-68-2 EC-No.: 204-642-4 REACH-no: 01-2119983573-26	0.6 – 1.1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Aldehyde C-14	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333-34	0.5 – 1	Aquatic Chronic 3, H412
trans-Anethole	CAS-No.: 4180-23-8 EC-No.: 224-052-0	0.5 – 0.9	Skin Sens. 1B, H317
d-Limonene	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-029-00-7;601-096-00-2 REACH-no: 01-2119493353-35	0.2 – 0.4	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.2 – 0.363	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	0.1 – 0.268	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Allyl phenoxyacetate	CAS-No.: 7493-74-5 EC-No.: 231-335-2	0.1 – 0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Acute 1, H400

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : 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 equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.
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 : Store in a well-ventilated place. Keep cool.
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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

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Isoamyl acetate (123-92-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	270 mg/m ³
IOEL TWA [ppm]	50 ppm
IOEL STEL	540 mg/m ³
IOEL STEL [ppm]	100 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	270 mg/m ³ (Pentyl acetate (all isomers))
MAK (OEL TWA) [ppm]	50 ppm (Pentyl acetate (all isomers))
MAK (OEL STEL)	540 mg/m ³ (Pentylacetate)
MAK (OEL STEL) [ppm]	100 ppm (Pentylacetate)
Belgium - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	270 mg/m ³
GVI (OEL TWA) [2]	50 ppm
KGVI (OEL STEL)	540 mg/m ³
KGVI (OEL STEL) [ppm]	100 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Denmark - Occupational Exposure Limits	
OEL TWA [1]	271 mg/m ³ (Amyl acetate, all isomers)
OEL TWA [2]	50 ppm (Amyl acetate, all isomers)
Estonia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm

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Isoamyl acetate (123-92-2)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	270 mg/m ³ (Pentyl acetate)
HTP (OEL TWA) [2]	50 ppm (Pentyl acetate)
HTP (OEL STEL)	540 mg/m ³
HTP (OEL STEL) [ppm]	100 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	270 mg/m ³ (restrictive limit)
VME (OEL TWA) [ppm]	50 ppm (restrictive limit)
VLE (OEL C/STEL)	540 mg/m ³ (restrictive limit)
VLE (OEL C/STEL) [ppm]	100 ppm (restrictive limit)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	270 mg/m ³
AGW (OEL TWA) [2]	50 ppm
Gibraltar - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Greece - Occupational Exposure Limits	
OEL TWA	530 mg/m ³
OEL TWA [ppm]	100 ppm
OEL STEL	800 mg/m ³
OEL STEL [ppm]	150 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	270 mg/m ³
CK (OEL STEL)	540 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	260 mg/m ³
OEL TWA [2]	50 ppm
OEL STEL	520 mg/m ³
OEL STEL [ppm]	100 ppm
Italy - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm

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Isoamyl acetate (123-92-2)	
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	270 mg/m ³
IPRV (OEL TWA) [ppm]	50 ppm
TPRV (OEL STEL)	540 mg/m ³
TPRV (OEL STEL) [ppm]	100 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Malta - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Netherlands - Occupational Exposure Limits	
TGG-15min (OEL STEL)	530 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	250 mg/m ³
NDSch (OEL STEL)	500 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA	270 mg/m ³ (indicative limit value)
OEL TWA [ppm]	50 ppm (indicative limit value)
OEL STEL	540 mg/m ³ (indicative limit value)
OEL STEL [ppm]	100 ppm (indicative limit value, regulated under Pentyl acetate, all isomers)
Romania - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	270 mg/m ³
NPHV (OEL TWA) [2]	50 ppm
NPHV (OEL C)	540 mg/m ³
Slovenia - Occupational Exposure Limits	
OEL TWA	270 mg/m ³
OEL TWA [ppm]	50 ppm
OEL STEL	540 mg/m ³
OEL STEL [ppm]	100 ppm

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Isoamyl acetate (123-92-2)	
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	270 mg/m ³ (indicative limit value)
VLA-ED (OEL TWA) [2]	50 ppm (indicative limit value)
VLA-EC (OEL STEL)	540 mg/m ³
VLA-EC (OEL STEL) [ppm]	100 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	270 mg/m ³ (Pentyl acetates)
NGV (OEL TWA) [ppm]	50 ppm (Pentyl acetates)
KTV (OEL STEL)	540 mg/m ³ (Pentyl acetates)
KTV (OEL STEL) [ppm]	100 ppm (Pentyl acetates)
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	260 mg/m ³
Grenseverdi (OEL TWA) [2]	50 ppm
Korttidsverdi (OEL STEL)	325 mg/m ³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	75 ppm (value calculated)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	50 ppm (Pentyl acetate, all isomers)
ACGIH OEL STEL [ppm]	100 ppm (Pentyl acetate, all isomers)
d-Limonene (5989-27-5)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	140 mg/m ³
HTP (OEL TWA) [2]	25 ppm
HTP (OEL STEL)	280 mg/m ³
HTP (OEL STEL) [ppm]	50 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	28 mg/m 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
Slovenia - Occupational Exposure Limits	
OEL TWA	28 mg/m ³
OEL TWA [ppm]	5 ppm
OEL STEL	112 mg/m ³
OEL STEL [ppm]	20 ppm
OEL chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	168 mg/m ³
VLA-ED (OEL TWA) [2]	30 ppm

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d-Limonene (5989-27-5)	
OEL chemical category	Sensitizer, skin - potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	140 mg/m ³
Grenseverdi (OEL TWA) [2]	25 ppm
Korttidsverdi (OEL STEL)	175 mg/m ³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)
OEL chemical category	Allergenic substance
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	40 mg/m ³
MAK (OEL TWA) [2]	7 ppm
KZGW (OEL STEL)	80 mg/m ³
KZGW (OEL STEL) [ppm]	14 ppm
OEL chemical category	Sensitizer

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light yellow. amber.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 75 °C (closed cup) ASTM D7094
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Hexyl cinnamic aldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg
LD50 oral	3100 mg/kg bodyweight
LD50 dermal rabbit	> 3000 mg/kg
LC50 Inhalation - Rat	> 5 mg/l/4h
Allyl cyclohexylpropionate (2705-87-5)	
LD50 oral rat	585 mg/kg
LD50 oral	480 mg/kg bodyweight
LD50 dermal rabbit	1600 mg/kg
LD50 dermal	1600 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	11 mg/l/4h
Aldehyde C-16 (77-83-8)	
LD50 oral rat	5470 mg/kg
LD50 dermal rat	> 2000 mg/kg
Allyl heptanoate (142-19-8)	
LD50 oral rat	500 mg/kg
LD50 oral	218 mg/kg bodyweight
LD50 dermal rabbit	810 mg/kg
LD50 dermal	810 mg/kg bodyweight
Methyl cinnamate (103-26-4)	
LD50 oral rat	2610 mg/kg
LD50 oral	2610 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
Allyl amyl glycolate (67634-00-8)	
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	0.43 mg/l/4h
LC50 Inhalation - Rat (Dust/Mist)	0.5 mg/l/4h
Allyl caproate (123-68-2)	
LD50 oral	300 mg/kg bodyweight
LD50 dermal rabbit	820 mg/kg
LD50 dermal	300 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	3 mg/l/4h

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Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg
LD50 dermal rat	> 2000 mg/kg
trans-Anethole (4180-23-8)	
LD50 oral rat	2090 mg/kg
LD50 dermal rabbit	> 4900 mg/kg
LC50 Inhalation - Rat	> 5.1 mg/l/4h
d-Limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5 g/kg
Triplal (Vertocitral) (68039-49-6)	
LD50 oral	3900 mg/kg bodyweight
Benzyl benzoate (120-51-4)	
LD50 oral rat	500 mg/kg
LD50 oral	1500 mg/kg bodyweight
LD50 dermal rabbit	4000 mg/kg
LD50 dermal	4000 mg/kg bodyweight
Allyl phenoxyacetate (7493-74-5)	
LD50 oral rat	475 µl/kg
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LD50 dermal	1100 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

d-Limonene (5989-27-5)	
IARC group	3 - Not classifiable

Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

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Allyl cyclohexylpropionate (2705-87-5)	
LC50 - Fish [1]	0.13 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
Aldehyde C-16 (77-83-8)	
LC50 - Fish [1]	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
Methyl cinnamate (103-26-4)	
LC50 - Fish [1]	2.76 mg/l (Exposure time: 96 h - Species: Danio rerio [static])
Allyl caproate (123-68-2)	
LC50 - Fish [1]	0.117 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
Aldehyde C-14 (104-67-6)	
LC50 - Fish [1]	569 mg/l 96 h
EC50 - Crustacea [1]	5.85 mg/l 48 h
EC50 - Other aquatic organisms [1]	5.94 mg/l 72 h
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)
Benzyl benzoate (120-51-4)	
LC50 - Fish [1]	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])
NOEC (chronic)	0.168 mg/l

12.2. Persistence and degradability

Methyl cinnamate (103-26-4)	
Persistence and degradability	Not established.
Benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Allyl cyclohexylpropionate (2705-87-5)	
Partition coefficient n-octanol/water (Log Pow)	4.28 (at 20 °C (at pH 5.3))
Aldehyde C-16 (77-83-8)	
Partition coefficient n-octanol/water (Log Pow)	2.4 (at 25 °C (cis isomer))
Allyl heptanoate (142-19-8)	
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 20 °C (at pH 5.3))
Methyl cinnamate (103-26-4)	
Partition coefficient n-octanol/water (Log Pow)	2.68 (at 25 °C (at pH >4.73-<7.06))
Bioaccumulative potential	Not established.
Allyl amyl glycolate (67634-00-8)	
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 2.3))

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Isoamyl acetate (123-92-2)	
Partition coefficient n-octanol/water (Log Pow)	2.7 (at 35 °C)
Allyl caproate (123-68-2)	
Partition coefficient n-octanol/water (Log Pow)	3.191 (at 20 °C (at pH 5))
Aldehyde C-14 (104-67-6)	
Partition coefficient n-octanol/water (Log Pow)	3.6 (at 25 °C)
d-Limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2))
Benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
Bioaccumulative potential	Not established.
Allyl phenoxyacetate (7493-74-5)	
Partition coefficient n-octanol/water (Log Pow)	2.33 (at 24.7 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1 UN number

UN-No. (ADR) : UN 3082
UN-No. (IMDG) : UN 3082
UN-No. (IATA) : UN 3082
UN-No. (ADN) : UN 3082
UN-No. (RID) : UN 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
Proper Shipping Name (ADN) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Allyl cyclohexylpropionate), 9, III, (-)
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Allyl cyclohexylpropionate), 9, III, MARINE POLLUTANT

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Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Allyl cyclohexylpropionate), 9, III
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Allyl cyclohexylpropionate), 9, III
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Allyl cyclohexylpropionate), 9, III

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 9
Danger labels (ADR) : 9



IMDG

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



IATA

Transport hazard class(es) (IATA) : 9
Danger labels (IATA) : 9



ADN

Transport hazard class(es) (ADN) : 9
Danger labels (ADN) : 9



RID

Transport hazard class(es) (RID) : 9
Danger labels (RID) : 9



14.4. Packing group

Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III
Packing group (RID)	: III

14.5. Environmental hazards

Dangerous for the environment : Yes

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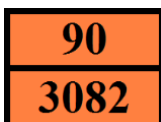
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 375, 601
Limited quantities (ADR) : 5l
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : -
EAC code : •3Z

Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP01, P001
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197, A215
ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M6
Special provisions (ADN) : 274, 335, 375, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

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Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	Isoamyl acetate
3(b)	Hexyl cinnamic aldehyde ; Allyl cyclohexylpropionate ; Aldehyde C-16 ; Allyl heptanoate ; Allyl amyl glycolate ; Allyl caproate
3(c)	Hexyl cinnamic aldehyde ; Allyl cyclohexylpropionate ; Aldehyde C-16 ; Allyl heptanoate ; Allyl caproate ; Aldehyde C-14
40.	Isoamyl acetate

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

15.1.2. National regulations

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907

Netherlands

SZW-lijst van kankerverwekkende stoffen : Allyl amyl glycolate, Triplal (Vertocitral) are listed

SZW-lijst van mutagene stoffen : Allyl amyl glycolate, Triplal (Vertocitral) are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

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SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Class for fire hazard : Class III-1

Store unit : 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
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
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
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.

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Full text of H- and EUH-statements:	
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.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.