

Apple Eucalyptus CC-16143

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 10/28/2021 Version: 1.0



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

1.1. Product identifier

Product form : Mixture
Product name : Apple Eucalyptus CC-16143
UFI : 4U44-4483-S00Q-JX5A
Product code : CC-16143
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 : Industrial use, Professional use
Industrial/Professional use spec : For professional use only
Industrial
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 corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Aspiration hazard, Category 1 H304
Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411
Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



Apple Eucalyptus CC-16143

Safety Data Sheet

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

Signal word (CLP)	: Danger
Contains	: Eucalyptus oil; Orange oil ; d-Limonene; Triplal (Vertocitral); Amyl cinnamic aldehyde; Iso E Super; Clove leaf oil ; Lemon oil ; Anise oil (Spanish)
Hazard statements (CLP)	: 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. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P264 - Wash hands, forearms and face thoroughly after handling. 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. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards

No additional information available

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]
Verdox	CAS-No.: 88-41-5 EC-No.: 201-828-7 REACH-no: 01-2119970713-33	5 – 10	Aquatic Chronic 2, H411
Eucalyptus oil	CAS-No.: 8000-48-4 EC-No.: 283-406-2;286-249-8;616-775-9 REACH-no: 01-2119978250-37	2.75 – 5.5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Diethyl malonate	CAS-No.: 105-53-3 EC-No.: 203-305-9 REACH-no: 01-2119886972-18	2 – 4	Eye Irrit. 2, H319
Orange oil	CAS-No.: 8008-57-9 EC-No.: 232-433-8; 600-006-9; 616-926-9 REACH-no: 01-2119493353-35	1.5 – 3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Aldehyde C-14	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333-34	1.3 – 2.6	Aquatic Chronic 3, H412

Apple Eucalyptus CC-16143

Safety Data Sheet

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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	1 – 2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one	CAS-No.: 76-22-2 EC-No.: 200-945-0	1 – 2	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 2, H371 Aquatic Chronic 2, H411
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.75 – 1.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Ethylene brassylate	CAS-No.: 105-95-3 EC-No.: 203-347-8 REACH-no: 01-2119976314-33	0.5 – 1	Aquatic Chronic 2, H411
Amyl cinnamic aldehyde	CAS-No.: 122-40-7 EC-No.: 204-541-5;453-530-3	0.3 – 0.6	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Lemon oil	CAS-No.: 8008-56-8 EC-No.: 284-515-8;616-925-3	0.2 – 0.4	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	0.18 – 0.36	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Iso E Super	CAS-No.: 54464-57-2 EC-No.: 259-174-3 REACH-no: 01-2119489989-04	0.125 – 0.25	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Clove leaf oil	CAS-No.: 8000-34-8 EC-No.: 616-772-2	0.125 – 0.25	Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304
Allyl amyl glycolate	CAS-No.: 67634-00-8 EC-No.: 266-803-5	0.075 – 0.15	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Acute Tox. 2 (Inhalation), H330
Anise oil (Spanish)	CAS-No.: 8007-70-3 EC-No.: 616-914-3	0.05 – 0.1	Skin Sens. 1, H317 Muta. 2, H341 Carc. 2, H351 Aquatic Chronic 3, H412

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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
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. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

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

Treat symptomatically.

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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.
----------------------	--

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

For containment	: Collect spillage.
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.

Apple Eucalyptus CC-16143

Safety Data Sheet

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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 locked up. Store in a well-ventilated place. Keep cool.
--------------------	---

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

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
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
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)

Apple Eucalyptus CC-16143

Safety Data Sheet

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

d-Limonene (5989-27-5)	
Korttidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)
Chemical category	Sensitizing 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
Chemical category	Sensitizer
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	13 mg/m ³
MAK (OEL TWA) [ppm]	2 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	12 mg/m ³
OEL TWA [ppm]	2 ppm
OEL STEL	19 mg/m ³
OEL STEL [ppm]	3 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	12 mg/m ³
OEL STEL	18 mg/m ³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	13 mg/m ³
GVI (OEL TWA) [2]	2 ppm
KGVI (OEL STEL)	19 mg/m ³
KGVI (OEL STEL) [ppm]	3 ppm
Denmark - Occupational Exposure Limits	
OEL TWA [1]	12 mg/m ³
OEL TWA [2]	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	1.9 mg/m ³
HTP (OEL TWA) [2]	0.3 ppm
HTP (OEL STEL)	5.7 mg/m ³
HTP (OEL STEL) [ppm]	0.9 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	12 mg/m ³
VME (OEL TWA) [ppm]	2 ppm
Greece - Occupational Exposure Limits	
OEL TWA	12 mg/m ³ (inhalable fraction)
OEL STEL	18 mg/m ³

Apple Eucalyptus CC-16143

Safety Data Sheet

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

1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)	
Ireland - Occupational Exposure Limits	
OEL TWA [1]	12 mg/m ³
OEL TWA [2]	2 ppm
OEL STEL	18 mg/m ³
OEL STEL [ppm]	3 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	3 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	12 mg/m ³
NDSch (OEL STEL)	18 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA [ppm]	2 ppm
OEL STEL [ppm]	3 ppm
Chemical category	A4 - Not Classifiable as a Human Carcinogen
Romania - Occupational Exposure Limits	
OEL TWA	1 mg/m ³
OEL TWA [ppm]	6 ppm
OEL STEL	3 mg/m ³
OEL STEL [ppm]	18 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	13 mg/m ³
NPHV (OEL TWA) [2]	2 ppm
NPHV (OEL C)	26 mg/m ³
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	13 mg/m ³
VLA-ED (OEL TWA) [2]	2 ppm
VLA-EC (OEL STEL)	19 mg/m ³
VLA-EC (OEL STEL) [ppm]	3 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	13 mg/m ³
WEL TWA (OEL TWA) [2]	2 ppm
WEL STEL (OEL STEL)	19 mg/m ³
WEL STEL (OEL STEL) [ppm]	3 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	12 mg/m ³
Grenseverdi (OEL TWA) [2]	2 ppm
Korttidsverdi (OEL STEL)	18 mg/m ³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	4 ppm (value calculated)

Apple Eucalyptus CC-16143

Safety Data Sheet

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

1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)

Switzerland - Occupational Exposure Limits

MAK (OEL TWA) [1]	13 mg/m ³ (aerosol, vapour)
MAK (OEL TWA) [2]	2 ppm (aerosol, vapour)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA [ppm]	2 ppm (synthetic)
ACGIH OEL STEL [ppm]	3 ppm (synthetic)
ACGIH chemical category	Not Classifiable as a Human Carcinogen synthetic

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

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Apple Eucalyptus CC-16143

Safety Data Sheet

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

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	: Not applicable
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)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.945
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.

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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

Verdox (88-41-5)	
LD50 oral rat	4600 mg/kg
LD50 oral	4600 mg/kg bodyweight
Diethyl malonate (105-53-3)	
LD50 oral rat	14900 µl/kg
LD50 dermal rabbit	> 16960 mg/kg
Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg
LD50 dermal rat	> 2000 mg/kg
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
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)	
LD50 oral	1500 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h
Triplal (Vertocitral) (68039-49-6)	
LD50 oral	3900 mg/kg bodyweight
Amyl cinnamic aldehyde (122-40-7)	
LD50 oral rat	3730 mg/kg
LD50 dermal rabbit	> 2000 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
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
Anise oil (Spanish) (8007-70-3)	
LD50 oral rat	2250 mg/kg
LD50 oral	2200 mg/kg bodyweight

Apple Eucalyptus CC-16143

Safety Data Sheet

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

Clove leaf oil (8000-34-8)	
LD50 oral rat	1370 mg/kg
LD50 oral	2650 mg/kg bodyweight
LD50 dermal rabbit	1200 mg/kg
LD50 dermal	2500 mg/kg bodyweight
Lemon oil (8008-56-8)	
LD50 oral rat	2840 mg/kg
Orange oil (8008-57-9)	
LD50 oral rat	4400 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
Eucalyptus oil (8000-48-4)	
LD50 oral rat	2480 mg/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
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
1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one (76-22-2)	
STOT-single exposure	May cause damage to organs.
STOT-repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
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.

Diethyl malonate (105-53-3)	
LC50 - Fish [1]	10.3 – 13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	202.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	508.2 mg/l (Species: Desmodesmus subspicatus)
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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

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

Benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Eucalyptus oil (8000-48-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Diethyl malonate (105-53-3)	
Partition coefficient n-octanol/water (Log Pow)	0.96
Benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	4
Bioaccumulative potential	Not established.
Eucalyptus oil (8000-48-4)	
Bioaccumulative potential	Not established.

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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

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

Apple Eucalyptus CC-16143

Safety Data Sheet

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



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
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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

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
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

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)	Eucalyptus oil ; Orange oil ; d-Limonene
3(b)	Eucalyptus oil ; Diethyl malonate ; Orange oil ; d-Limonene ; Triplal (Vertocitral)
3(c)	Verdox ; Eucalyptus oil ; Orange oil ; Aldehyde C-14 ; Ethylene brassylate ; d-Limonene ; Triplal (Vertocitral)
40.	Eucalyptus oil ; Orange oil ; d-Limonene ; 1,7,7-Trimethylbicyclo[2.2.1]heptan-2-one

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

Apple Eucalyptus CC-16143

Safety Data Sheet

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

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

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)

Netherlands

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

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

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

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

Abbreviations and acronyms	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level

Apple Eucalyptus CC-16143

Safety Data Sheet

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

Abbreviations and acronyms	
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) 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
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 2	Flammable solids, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 2	Specific target organ toxicity — Single exposure, Category 2

Apple Eucalyptus CC-16143

Safety Data Sheet

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

Full text of H- and EUH-statements	
H226	Flammable liquid and vapour.
H228	Flammable solid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
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.

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.