

Revision date: 05.04.2018

Product code:

Page 1 of 14

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

#### 1.1. Product identifier

Duftöl 10ml Apfel Zimt =< 125 ml

#### Further trade names

This MSDS covers the following products: -91189 Duftöl 10ml Apfel Zimt -50578 Duftöl 10ml Apfel Zimt

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

# Use of the substance/mixture

Perfumes, fragrances

#### Uses advised against

Company name:

Any non-intended use.

# 1.3. Details of the supplier of the safety data sheet

Promed GmbH Cosmetic Products, Lindenweg 11, 82490 Farchant, Germany

Responsible Department:

Dr. Gans-Eichler Chemieberatung GmbH Raesfeldstr. 22 D-48149 Münster

e-mail: Tel.: www.tge-consult.de info@tge-consult.de +49(0)251/394868-69

# **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

# Regulation (EC) No. 1272/2008

Hazard categories: Respiratory or skin sensitisation: Skin Sens. 1 Hazardous to the aquatic environment: Aquatic Chronic 3 Hazard Statements: May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.

# 2.2. Label elements

# Regulation (EC) No. 1272/2008

#### Hazard components for labelling

a-methylcinnamaldehyde cinnamaldehyde eugenol 4-tert-Butylcyclohexyl acetate Caryophyllene ethyl 2,3-epoxy-3-phenylbutyrate coumarin 2,4-Dimethyl-3-cyclohexene-1-carbaldehyde 1,8-Cineole Cinnamonitrile cinnamyl alcohol

Signal word:

Warning



Revision date: 05.04.2018

Product code:

Page 2 of 14





# Hazard statements

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.
Precautionary sta	itements
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P302+P352	IF ON SKIN: Wash with plenty of water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container to local/regional/national/international regulations.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

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

# 3.2. Mixtures

# Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	Classification according to Regulat	ion (EC) No. 1272/2008	3 [CLP]	
20298-69-5	cis-2-tert-butylcyclohexyl acetate			5 - < 10 %
	243-718-1		01-2119970713-33	
	Aquatic Chronic 2; H411			
101-39-3	a-methylcinnamaldehyde			5 - < 10 %
	202-938-8		01-2119538797-21	
	Skin Sens. 1; H317			
104-55-2	cinnamaldehyde			1 - < 5 %
	203-213-9		01-2119935242-45	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit.	2, Skin Sens. 1; H312 I	H315 H319 H317	
97-53-0	eugenol	1 - < 5 %		
	202-589-1			
	Eye Irrit. 2, Skin Sens. 1B; H319 H	317		
32210-23-4	4-tert-Butylcyclohexyl acetate	1 - < 5 %		
	250-954-9		01-2119976286-24	
	Skin Sens. 1B; H317			
87-44-5	Caryophyllene			< 1 %
	201-746-1			
	Skin Sens. 1B, Asp. Tox. 1; H317 H			
77-83-8	ethyl 2,3-epoxy-3-phenylbutyrate			< 1 %
	201-061-8			
	Skin Sens. 1B, Aquatic Chronic 2;	H317 H411		
123-68-2	Allyl hexanoate			< 1 %
	204-642-4		01-2119983573-26	



Revision date	e: 05.04.2018	Product code:	Page 3 of 1
	Acute Tox. 3, Acute Tox. 3, Acute H400 H412	Tox. 3, Aquatic Acute 1, Aquatic Chronic 3; H331 H311	H301
91-64-5	coumarin		< 1 %
	202-086-7	01-2119949300	)-45
	Acute Tox. 4, Skin Sens. 1, Aquat	ic Chronic 3; H302 H317 H412	
68039-49-6	2,4-Dimethyl-3-cyclohexene-1-ca	rbaldehyde	< 1 %
	268-264-1		
	Skin Irrit. 2, Skin Sens. 1B, Aquat	ic Chronic 2; H315 H317 H411	
470-82-6	1,8-Cineole		< 1 %
	207-431-5		
	Flam. Liq. 3, Skin Sens. 1; H226	H317	
1885-38-7	Cinnamonitrile		< 1 %
	217-552-5		
	Acute Tox. 3, Acute Tox. 4, Skin S	Sens. 1; H301 H312 H317	
104-54-1	cinnamyl alcohol		< 1 %
	203-212-3		
	Skin Sens. 1B; H317	· · ·	

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

#### **Further Information**

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH).

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

#### After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

#### After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

# After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

#### 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

Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.



Revision date: 05.04.2018

Product code:

Page 4 of 14

# Unsuitable extinguishing media

High power water jet.

# 5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

#### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

### **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Discharge into the environment must be avoided.

# 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

#### 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

Wear suitable protective clothing. See section 8.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Further information on handling

General protection and hygiene measures: refer to chapter 8

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

# Advice on storage compatibility

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

#### Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 20°C

Protect against: Light. UV-radiation/sunlight. heat. moisture.

### 7.3. Specific end use(s)

refer to chapter 1.

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

#### 8.1. Control parameters



Revision date: 05.04.2018

Product code:

Page 5 of 14

# **DNEL/DMEL** values

CAS No	Substance						
DNEL type		Exposure route	Effect	Value			
101-39-3	a-methylcinnamaldehyde	a-methylcinnamaldehyde					
Worker DNE	L, long-term	inhalation	systemic	13.3 mg/m <sup>3</sup>			
Worker DNE	L, long-term	inhalation	local	13.3 mg/m <sup>3</sup>			
Worker DNE	L, long-term	dermal	systemic	2.21 mg/kg bw/day			
Worker DNE	L, long-term	dermal	local	3.5 mg/cm <sup>2</sup>			
Consumer D	NEL, long-term	inhalation	systemic	3.27 mg/m <sup>3</sup>			
Consumer D	NEL, long-term	inhalation	local	3.27 mg/m <sup>3</sup>			
Consumer D	NEL, long-term	dermal	systemic	1.11 mg/kg bw/day			
Consumer D	NEL, long-term	dermal	local	3.5 mg/cm <sup>2</sup>			
Consumer D	NEL, long-term	oral	systemic	1.1 mg/kg bw/day			
123-68-2	Allyl hexanoate						
Worker DNE	L, long-term	dermal	systemic	4,3 mg/kg bw/day			
Worker DNE	L, long-term	inhalation	systemic	15 mg/m³			
Consumer D	NEL, long-term	dermal	systemic	3,7 mg/kg bw/day			
Consumer D	NEL, long-term	oral	systemic	2,1 mg/kg bw/day			
91-64-5	coumarin						
Worker DNE	L, long-term	inhalation	systemic	6,78 mg/m³			
Consumer D	NEL, long-term	dermal	systemic	0,39 mg/kg bw/day			
Consumer D	NEL, long-term	inhalation	systemic	1,69 mg/m³			
Consumer D	NEL, long-term	oral	systemic	0,39 mg/kg bw/day			

# **PNEC** values

CAS No	Substance	
Environmen	tal compartment	Value
101-39-3	a-methylcinnamaldehyde	
Freshwater		0.001 mg/l
Freshwater	(intermittent releases)	0.012 mg/l
Marine wate	r	0.0001 mg/l
Freshwater	sediment	0.04 mg/kg
Marine sedii	0.004 mg/kg	
Micro-organ	isms in sewage treatment plants (STP)	3.66 mg/l
32210-23-4	4-tert-Butylcyclohexyl acetate	
Freshwater		0,0053 mg/l
Marine wate	r	0,00053 mg/l
Freshwater	sediment	0,21 mg/kg
Marine sedii	nent	2,01 mg/kg
Secondary p	66,67 mg/kg	
Micro-organ	isms in sewage treatment plants (STP)	12,3 mg/l
Soil		0.42 mg/kg



Revision date: 05.04.2018

Product code:

Page 6 of 14

123-68-2	Allyl hexanoate	
Freshwater		0,000117 mg/l
Marine water	r	0,000012 mg/l
Freshwater s	sediment	0,00446 mg/kg
Marine sedin	nent	0,000446 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	10 mg/l
Soil		0,000825 mg/kg
91-64-5	coumarin	
Freshwater		0,019 mg/l
Freshwater (	(intermittent releases)	0,0145 mg/l
Marine wate	r	0,0019 mg/l
Marine water	r (intermittent releases)	0,0145 mg/l
Freshwater s	sediment	0,15 mg/kg
Marine sediment		0,015 mg/kg
Micro-organi	sms in sewage treatment plants (STP)	6,4 mg/l
Soil		0,018 mg/kg

# Additional advice on limit values

To date, no national critical limit values exist.

# 8.2. Exposure controls



#### Appropriate engineering controls

Professional: Provide adequate ventilation.

#### Protective and hygiene measures

Professional:

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

# Eye/face protection

Professional: Wear safety glasses; chemical goggles (if splashing is possible). DIN EN 166

# Hand protection

Professional: Wear suitable gloves. Suitable material: FKM (fluororubber). - Thickness of glove material: 0,4 mm Breakthrough time >= 8 h Butyl rubber. - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm Breakthrough time >= 8 h PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm Breakthrough time >= 8 h The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard





Revision date: 05.04.2018

Product code:

Page 7 of 14

# EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

# Skin protection

Professional:

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### **Respiratory protection**

#### Professional:

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-exceeding exposure limit values

-insufficient ventilation and aerosol or mist formation

Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

# **Environmental exposure controls**

No special precautionary measures are necessary.

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

# 9.1. Information on basic physical and chemical properties

Colour:greenish characteristicPH-Value:not determined <b>Changes in the physical state</b> not determinedMelting point:not determinedInitial boiling point and boiling range:not determinedSublimation point:not determinedSoftening point:not determinedPour point:not determinedPour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustion <b>Explosive properties</b> nonenot determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedNorizizing properties nonenot determinedVapour pressure:<10 hPa(at 50 °C)<10 hPa	Physical state:	liquid	
pH-Value: not determined Changes in the physical state Melting point: not determined Initial boiling point and boiling range: not determined Sublimation point: not determined Softening point: not determined Pour point: not determined Pour point: not determined Pour point: >100 °C Sustaining combustion: Not sustaining combustion <b>Explosive properties</b> none Lower explosion limits: not determined Upper explosion limits: not determined Ignition temperature: not determined <b>Auto-ignition temperature</b> Gas: not determined Decomposition temperature: not determined <b>Cxidizing properties</b> none Vapour pressure: <10 hPa	Colour:	greenish	
Changes in the physical stateMelting point:not determinedInitial boiling point and boiling range:not determinedSublimation point:not determinedSoftening point:not determinedPour point:not determinedPour point:not determinedPour point:not determinedPour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustionExplosive properties noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonenot determinedVapour pressure:<10 hPa	Odour:	characteristic	
Melting point:not determinedInitial boiling point and boiling range:not determinedSublimation point:not determinedSoftening point:not determinedPour point:not determinedPour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustion <b>Explosive properties</b> noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonenot determinedVapour pressure:< 10 hPa	pH-Value:	not determined	
Initial boiling point and boiling range: Initial boiling point and boiling range: Sublimation point: Softening point: Pour point: Pour point: Pour point: Pour point: Itash point: Sustaining combustion: Explosive properties none Lower explosion limits: Not sustaining combustion Explosive properties none Lower explosion limits: Not determined Upper explosion limits: not determined Ignition temperature: Gas: Not determined Decomposition temperature: Not determined Decomposition temperature: Not determined Vapour pressure: Sustaining combustion Sustaining combustion Not sustaining combustion Not sustaining combustion Not determined Sustaining combustion Not determined Not determined Sustaining properties Not determin	Changes in the physical state		
Sublimation point:not determinedSoftening point:not determinedPour point:not determinedPour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustionExplosive properties noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonenot determinedVapour pressure:<10 hPa	Melting point:	not determined	
Softening point:not determinedPour point:not determinedPour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustionExplosive properties noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonenot determinedVapour pressure:<10 hPa	Initial boiling point and boiling range:	not determined	
Pour point:not determinedFlash point:>100 °CSustaining combustion:Not sustaining combustionExplosive properties noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties noneNot determinedVapour pressure:<10 hPa	Sublimation point:	not determined	
Flash point:>100 °CSustaining combustion:Not sustaining combustionExplosive properties noneNot sustaining combustionLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonenot determinedVapour pressure:< 10 hPa	Softening point:	not determined	
Sustaining combustion: Not sustaining combustion Explosive properties none Lower explosion limits: not determined Upper explosion limits: not determined Ignition temperature: not determined Auto-ignition temperature Gas: not determined Decomposition temperature: not determined Decomposition temperature: not determined Vapour pressure: <10 hPa	Pour point:	not determined	
Explosive properties nonenot determinedLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedAuto-ignition temperature Gas:not determinedDecomposition temperature:not determinedDecomposition temperature:not determinedOxidizing properties nonestatementVapour pressure:< 10 hPa	Flash point:	>100 °C	
noneLower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedAuto-ignition temperaturenot determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonex 40 hPa	Sustaining combustion:	Not sustaining combustion	
Lower explosion limits:not determinedUpper explosion limits:not determinedIgnition temperature:not determinedAuto-ignition temperaturenot determinedGas:not determinedDecomposition temperature:not determinedOxidizing properties nonestatementVapour pressure:< 10 hPa	Environment of the second s		
Upper explosion limits:not determinedIgnition temperature:not determinedAuto-ignition temperatureGas:not determinedDecomposition temperature:not determinedOxidizing properties noneVapour pressure:< 10 hPa	Explosive properties		
Ignition temperature: not determined          Auto-ignition temperature       not determined         Gas:       not determined         Decomposition temperature:       not determined         Oxidizing properties       not determined         None          Vapour pressure:       < 10 hPa			
Auto-ignition temperature       not determined         Gas:       not determined         Decomposition temperature:       not determined         Oxidizing properties       not determined         Vapour pressure:       < 10 hPa	none	not determined	
Gas:not determinedDecomposition temperature:not determinedOxidizing properties noneVapour pressure:< 10 hPa	none Lower explosion limits:		
Decomposition temperature: not determined Oxidizing properties none Vapour pressure: < 10 hPa	none Lower explosion limits: Upper explosion limits:	not determined	
Oxidizing properties none Vapour pressure: < 10 hPa	none Lower explosion limits: Upper explosion limits: Ignition temperature:	not determined	
none <a></a> <	none Lower explosion limits: Upper explosion limits: Ignition temperature: Auto-ignition temperature	not determined	
····· ··· ··· ··· ··· ··· ··· ··· ···	none Lower explosion limits: Upper explosion limits: Ignition temperature: <b>Auto-ignition temperature</b> Gas:	not determined not determined not determined	
	none Lower explosion limits: Upper explosion limits: Ignition temperature: Auto-ignition temperature Gas: Decomposition temperature: Oxidizing properties	not determined not determined not determined	



Revision date: 05.04.2018	Duftöl 10ml Apfel Zimt =< 125 ml Product code:	Page 8 of 14
Density (at 20 °C):	1,012 - 1,022 g/cm <sup>3</sup>	
Water solubility:	not determined	
Solubility in other solvents not determined		
Partition coefficient:	not determined	
Viscosity / dynamic:	not determined	
Viscosity / kinematic:	not determined	
Flow time:	not determined	
Vapour density:	not determined	
Evaporation rate:	not determined	
Solvent separation test:	not determined	
Solvent content:	not determined	
9.2. Other information		
Solid content:	not determined	

# SECTION 10: Stability and reactivity

# 10.1. Reactivity

No information available.

# 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3. Possibility of hazardous reactions

No information available.

# 10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

# 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

# 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO2).

# **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

# Toxicocinetics, metabolism and distribution

No data available.

# Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
101-39-3	a-methylcinnamaldehyde						
	oral	LD50 mg/kg	>2000	Rat.	ECHA Dossi	ier	
	dermal	LD50 mg/kg	>5000	Rabbit.	ECHA Dossi	ier	
104-55-2	cinnamaldehyde						
	oral	LD50 mg/kg	2200	Rat	ECHA Dossi	ier	



Revision date	e: 05.04.2018			Product code:		Page 9 of 14
	dermal	LD50 mg/kg	1260	Rabbit	ECHA Dossier	
97-53-0	eugenol					
	oral	LD50 mg/kg	>2000	Rat	ECHA Dossier	
	inhalative (4 h) vapour	LC50	5 mg/l	Rat	ECHA Dossier	
32210-23-4	4-tert-Butylcyclohexyl ac	etate				
	oral	LD50 mg/kg	3370	Rat	ECHA Dossier	
	dermal	LD50 mg/kg	>4680	Rabbit	ECHA Dossier	
77-83-8	ethyl 2,3-epoxy-3-pheny	lbutyrate				
	oral	LD50 mg/kg	5470	Rat.	ECHA Dossier	
	dermal	LD50 mg/kg	>2000	Rat.	ECHA Dossier	
123-68-2	Allyl hexanoate					
	oral	ATE mg/kg	100			
	dermal	LD50 mg/kg	820	Rabbit.	ECHA Dossier	
	inhalative vapour	ATE	3 mg/l			
	inhalative aerosol	ATE	0,5 mg/l			
91-64-5	coumarin			-		
	oral	ATE mg/kg	500			
1885-38-7	Cinnamonitrile					
	oral	ATE mg/kg	100			
	dermal	ATE mg/kg	1100			
104-54-1	cinnamyl alcohol					
	inhalative (4 h) vapour	LC50	757 mg/l	Rat	ECHA Dossier	

#### Irritation and corrosivity

Based on available data, the classification criteria are not met.

#### Sensitising effects

May cause an allergic skin reaction. (a-methylcinnamaldehyde; cinnamaldehyde; eugenol; 4-tert-Butylcyclohexyl acetate; Caryophyllene; ethyl 2,3-epoxy-3-phenylbutyrate; coumarin; 2,4-Dimethyl-3-cyclohexene-1-carbaldehyde; 1,8-Cineole; Cinnamonitrile; cinnamyl alcohol)

# Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

# STOT-single exposure

Based on available data, the classification criteria are not met.

# STOT-repeated exposure

Based on available data, the classification criteria are not met.

# Aspiration hazard

Based on available data, the classification criteria are not met.

# Specific effects in experiment on an animal

No data available.



Revision date: 05.04.2018

Product code:

Page 10 of 14

# **SECTION 12: Ecological information**

# 12.1. Toxicity

The product has not been tested.

CAS No	No Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
101-39-3	a-methylcinnamaldehyde						
	Acute fish toxicity	LC50	1,7 mg/l	96 h	Pimephales promelas (fathead minnow)	ECHA Dossier	
	Acute algae toxicity	ErC50 mg/l	14,8	72 h	Desmodesmus subspicatus	ECHA Dossier	
	Acute crustacea toxicity	EC50	9,9 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Acute bacteria toxicity	(366 mg/	(1)	3 h	Activated sludge	ECHA Dossier	
104-55-2	cinnamaldehyde						
	Acute fish toxicity	LC50 mg/l	(>3,5)	96 h	Poecilia reticulata	ECHA Dossier	
	Acute algae toxicity	ErC50 mg/l	(16,09)	72 h	Chlorella vulgaris	ECHA Dossier	
	Acute bacteria toxicity	((71) mg/	/I)	3 h	Activated sludge	ECHA Dossier	
97-53-0	eugenol			1	1		
	Acute fish toxicity	LC50	13 mg/l	96 h	Danio rerio	ECHA Dossier	
	Acute algae toxicity	ErC50	24 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	1,13	48 h	Daphnia magna	ECHA Dossier	
	Fish toxicity	NOEC	10 mg/l	4 d	Danio rerio	ECHA Dossier	
	Algea toxicity	NOEC	23 mg/l	3 d	Desmodesmus subspicatus	ECHA Dossier	
32210-23-4	4-tert-Butylcyclohexyl ace	etate					
	Acute fish toxicity	LC50	8,6 mg/l	96 h	Cyprinus carpio (Common Carp)	ECHA Dossier	
	Acute algae toxicity	ErC50	22 mg/l	72 h	Desmodesmus subspicatus	ECHA Dossier	
	Acute crustacea toxicity	EC50	5,3 mg/l	48 h	Daphnia magna	ECHA Dossier	
	Acute bacteria toxicity	(302 mg/	(1)	3 h	Activated sludge	ECHA Dossier	
77-83-8	ethyl 2,3-epoxy-3-phenyll	outyrate					
	Acute fish toxicity	LC50 mg/l	(4,2)	96 h	Oncorhynchus mykiss	ECHA Dossier	
	Acute algae toxicity	ErC50	(42) mg/l	96 h	Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50	(52) mg/l	48 h	Daphnia magna	ECHA Dossier	
123-68-2	Allyl hexanoate			-			
	Acute fish toxicity	LC50 mg/l	0,117	96 h	Brachydanio rerio (zebra-fish)	ECHA Dossier	
470-82-6	1,8-Cineole						
	Acute fish toxicity	LC50	57 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	ECHA Dossier	
	Acute algae toxicity	ErC50	>74 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA Dossier	
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna	ECHA Dossier	



Revision date: 05.04.2018

Product code:

Page 11 of 14

# 12.2. Persistence and degradability

The product has not been tested

CAS No	Chemical name									
	Method	Value	d	Source						
	Evaluation									
101-39-3	a-methylcinnamaldehyde									
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	97%	28	ECHA Dossier						
	Easily biodegradable (concerning to the criteria of the OE	CD)	·							
104-55-2	cinnamaldehyde									
	OECD 301D/ EEC 92/69/V, C.4-E	24,98%	5	ECHA Dossier						
	Readily biodegradable (according to OECD criteria).									
97-53-0	eugenol			-						
	EU Method C.4-E	82%	28	ECHA						
	Readily biodegradable (according to OECD criteria).									
32210-23-4	4-tert-Butylcyclohexyl acetate									
	EU Method C.4-C	75%	29	ECHA Dossier						
	Product is partially biodegradable.									
77-83-8	ethyl 2,3-epoxy-3-phenylbutyrate									
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	53%	28	ECHA Dossier						
	Not easily bio-degradable (according to OECD-criteria).									
123-68-2	Allyl hexanoate									
	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	70%	28	ECHA Dossier						
	Easily biodegradable (concerning to the criteria of the OE	CD)								
91-64-5	coumarin									
	OECD 301C / ISO 9408 / EEC 92/69 annex V, C.4-F	100%	28	ECHA Dossier						
	Product is biodegradable.									
470-82-6	1,8-Cineole									
	OECD 301F / ISO 9408 / EEC 92/69 annex V, C.4-D	82%	28	ECHA Dossier						
	Easily biodegradable (concerning to the criteria of the OE	CD)								

# 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

# Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
104-55-2	cinnamaldehyde	2,1
97-53-0	eugenol	1,83
32210-23-4	4-tert-Butylcyclohexyl acetate	4,8
77-83-8	ethyl 2,3-epoxy-3-phenylbutyrate	3,0
104-54-1	cinnamyl alcohol	1,636

# 12.4. Mobility in soil

No data available.

# 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6. Other adverse effects

No data available.

# **Further information**

Do not allow to enter into surface water or drains.



Revision date: 05.04.2018

Product code:

Page 12 of 14

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

#### Advice on disposal

160305

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to EAKV:

#### Waste disposal number of waste from residues/unused products

WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

#### Waste disposal number of used product

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

#### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

# Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

# **SECTION 14: Transport information**

#### Land transport (ADR/RID)

14.1. UN number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Inland waterways transport (ADN) 14.1. UN number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Marine transport (IMDG) 14.1. UN number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Air transport (ICAO-TI/IATA-DGR) 14.1. UN number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation. No dangerous good in sense of this transport regulation.

no



Duftöl 10	ml Apfel	Zimt =<	125 m
-----------	----------	---------	-------

Revision date: 05.04.2018

Product code:

Page 13 of 14

# 14.6. Special precautions for user

refer to chapter 6-8

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

not relevant

# **SECTION 15: Regulatory information**

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

# EU regulatory information

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU	Not subject to 2012/18/EU (SEVESO III)
(SEVESO III):	

#### Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. REACH 1907/2006 Appendix XVII, No (mixture): 3

#### National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). 2 - clearly water contaminating

Water contaminating class (D):

#### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: cis-2-tert-butylcyclohexyl acetate cinnamaldehyde 4-tert-Butylcyclohexyl acetate

#### **SECTION 16: Other information**

#### Changes

Rev. 1.0; Initial release: 05.04.2018

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route CAS Chemical Abstracts Service DNEL: Derived No Effect Level IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration. 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level NTP: National Toxicology Program N/A: not applicable OSHA: Occupational Safety and Health Administration PNEC: predicted no effect concentration



Revision date: 05.04.2018

Product code:

Page 14 of 14

PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern

TRGS Technische Regeln fuerGefahrstoffe

TSCA: Toxic Substances Control Act

VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

# Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	Calculation method

# Relevant H and EUH statements (number and full text)

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.	
H331	Toxic if inhaled.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
H412	Harmful to aquatic life with long lasting effects.	

# **Further Information**

Classification according EC regulation 1272/2008 (CLP): - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)