

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 10/11/2019 Revision date: 8/11/2023 Version: 2.1

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

1.1. Product identifier

Product form	: Mixture
Product name	: Cinnamon Apple #EU16008F
UFI	: 4CAE-D1W6-Q00K-XSCP
Product code	: EU16008F
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

FRENCH COLOR & FRAGRANCE International GmbH Mittlerer Weg 35 DE– 79424 Auggen Germany T 49-7631-931-8900 SDS@frenchcolor.com - www.frenchcolor.com

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]

Acute toxicity (oral), Category 4	H302
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- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP)



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	GHS07 GHS08 GHS09
Signal word (CLP)	: Danger
Contains	: Cinnamic aldehyde; d-Limonene; COUMARIN; Triplal (Vertocitral); Linalool
Hazard statements (CLP)	: H302 - Harmful if swallowed.
	H304 - May be fatal if swallowed and enters airways.
	H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
	P264 - Wash hands, forearms and face thoroughly after handling.
	P270 - Do not eat, drink or smoke when using this product.
	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.
Extra phrases	: For professional users only.
2.3. Other hazards	

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

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	20 – 40	Aquatic Chronic 2, H411
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 REACH-no: 01-2119935242- 45	11 – 22	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
d-Limonene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 205-341-0 EC Index-No.: 601-096-00-2 REACH-no: 01-2119493353- 35	8 – 16	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756- 26	4.3 - 8.6	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 2, H411

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aldehyde C-14	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333- 34	4 – 8	Aquatic Chronic 3, H412
Ethyl vanillin	CAS-No.: 121-32-4 EC-No.: 204-464-7 REACH-no: 01-211958961-24	1.5 – 3	Eye Irrit. 2, H319
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.2 – 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Benzyl alcohol substance with national workplace exposure limit(s) (BG, CZ, DE, FI, LT, LV, PL, SI, CH)	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630- 38	0.2 - 0.4	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Linalool	CAS-No.: 78-70-6 EC-No.: 201-134-4 EC Index-No.: 603-235-00-2 REACH-no: 01-2119474016- 42	0.2 - 0.4	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317

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

SECTION 4: First aid measures	
4.1. Description of first aid measures	3
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash with plenty of water/ Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs: Remove affected clothing and wash all exposed skin area with mild soap and water followed by warm water rinse.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Do not induce vomiting. Call a physician immediately.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact Symptoms/effects after ingestion	 Not expected to present a significant hazard under anticipated conditions of normal use. May cause an allergic skin reaction. Irritation. May cause an allergic skin reaction. Causes skin irritation. Eye irritation. Causes serious eye irritation. Risk of lung oedema.
	lical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media Unsuitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.Do not use a heavy water stream.
5.2. Special hazards arising from the subst	ance or mixture
Fire hazard Explosion hazard Hazardous decomposition products in case of fire	 Combustible liquid. May form flammable/explosive vapour-air mixture. Toxic fumes may be released.
5.3. Advice for firefighters	
Firefighting instructions Protection during firefighting	 Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release meas	ures
6.1. Personal precautions, protective equ	ipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
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. Evacuate unnecessary personnel.
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". Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	

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

6.3. Methods and material for containme	ent and cleaning up
For containment Methods for cleaning up	 Collect spillage. Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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. See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. No open flames. No smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

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Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage,	including any incompatibilities
Technical measures Storage conditions	Proper grounding procedures to avoid static electricity should be followed.Store in a well-ventilated place. Keep cool. Keep in fireproof place. Keep only in the original
	container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container closed when not in use. Store locked up.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Heat sources. Sources of ignition. Direct sunlight.
Storage temperature	: 25 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging	: Store in a closed container.
Packaging materials	: Do not store in corrodable metal.

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/m³			
HTP (OEL STEL) [ppm]	50 ppm			
Germany - Occupational Exposure Limits (TRGS 90	0)			
AGW (OEL TWA) [1]	28 mg/m $^{\rm 3}$ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)			
AGW (OEL TWA) [2]	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)			
Chemical category	Skin notation, Skin sensitization			
Slovenia - Occupational Exposure Limits				
OEL TWA	28 mg/m³			
OEL TWA [ppm]	5 ppm			
OEL STEL	112 mg/m³			
OEL STEL [ppm]	20 ppm			
OEL chemical category	Potential for cutaneous absorption			
Spain - Occupational Exposure Limits				
VLA-ED (OEL TWA) [1]	168 mg/m³			
VLA-ED (OEL TWA) [2]	30 ppm			
OEL chemical category	Sensitizer, skin - potential for cutaneous absorption			

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d-Limonene (5989-27-5)				
Norway - Occupational Exposure Limits				
Grenseverdi (OEL TWA) [1]	140 mg/m ³			
Grenseverdi (OEL TWA) [2]	25 ppm			
Korttidsverdi (OEL STEL)	175 mg/m³ (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/m³			
KZGW (OEL STEL) [ppm]	14 ppm			
OEL chemical category	Sensitizer			
Benzyl alcohol (100-51-6)				
Bulgaria - Occupational Exposure Limits				
OEL TWA	5 mg/m³			
Czech Republic - Occupational Exposure Limits				
PEL (OEL TWA)	40 mg/m ³			
Finland - Occupational Exposure Limits				
HTP (OEL TWA) [1]	45 mg/m ³			
HTP (OEL TWA) [2]	10 ppm			
Germany - Occupational Exposure Limits (TRGS 900)				
AGW (OEL TWA) [1]	22 mg/m³ (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			
Latvia - Occupational Exposure Limits	·			
OEL TWA	5 mg/m³			
Lithuania - Occupational Exposure Limits				
IPRV (OEL TWA)	5 mg/m ³			
OEL chemical category	Skin notation			
Poland - Occupational Exposure Limits				
NDS (OEL TWA)	240 mg/m ³			
Slovenia - Occupational Exposure Limits				
OEL TWA	22 mg/m ³			
OEL TWA [ppm]	5 ppm			
OEL STEL	44 mg/m ³			
OEL STEL [ppm]	10 ppm			
OEL chemical category	Potential for cutaneous absorption			

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Benzyl alcohol (100-51-6)			
Switzerland - Occupational Exposure Limits			
MAK (OEL TWA) [1] 22 mg/m ³ (aerosol, vapour)			
MAK (OEL TWA) [2] 5 ppm (aerosol, vapour)			
OEL chemical category Skin notation			

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:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses. Chemical goggles or safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection: Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection: Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

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SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and che	emical properties			
Physical state	: Liquid			
Colour	: light yellow. amber. Conforms to standard.			
Odour	: characteristic. characteristic.			
Odour threshold	: Not available			
Melting point	: Not applicable			
Freezing point	: Not available			
Boiling point	: Not available			
Flammability	: Not applicable			
Explosive limits	: Not available			
Lower explosion limit	: Not available			
Upper explosion limit	: Not available			
Flash point	: 71 °C (closed cup) ASTM D7094			
Auto-ignition temperature	: Not available			
Decomposition temperature	: Not available			
рН	: Not available			
Viscosity, kinematic	: Not available			
Solubility	: Not available			
Partition coefficient n-octanol/water (Log Kow)	: Not available			
Vapour pressure	: Not available			
Vapour pressure at 50°C	: Not available			
Density	: Not available			
Relative density	: ≈1.02			
Relative vapour density at 20°C	: Not available			
Particle characteristics	: Not applicable			

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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

Combustible liquid. May form flammable/explosive vapour-air mixture. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Open flame. Overheating. Direct sunlight. Heat. Sparks. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

May release flammable gases. fume. Carbon monoxide. Carbon dioxide.

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SECTION 11: Toxicological information				
11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008				
Acute toxicity (dermal) :	Harmful if swallowed. Not classified Not classified			
Cinnamon Apple #EU16008F				
ATE CLP (oral)	1162.791 mg/kg bodyweight			
Verdox (88-41-5)				
LD50 oral rat	4600 mg/kg (Source: NLM_CIP)			
LD50 oral	4600 mg/kg bodyweight			
Cinnamic aldehyde (104-55-2)				
LD50 oral rat	2220 mg/kg (Source: NLM_CIP)			
LD50 oral	2200 mg/kg bodyweight			
LD50 dermal rabbit	1260 mg/kg (Source: EPA_HPV)			
LD50 dermal	1100 mg/kg bodyweight			
d-Limonene (5989-27-5)				
LD50 oral rat	4400 mg/kg (Source: CHEMVIEW)			
LD50 dermal rabbit	> 5 g/kg (Source: CHEMVIEW)			
COUMARIN (91-64-5)				
LD50 oral rat	> 5000 mg/kg (Source: JAPAN_GHS)			
LD50 oral	290 mg/kg bodyweight			
LD50 dermal rat	293 mg/kg (Source: ECHA_API)			
Aldehyde C-14 (104-67-6)				
LD50 oral rat	18500 mg/kg (Source: NLM_CIP)			
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)			
Ethyl vanillin (121-32-4)				
LD50 oral rat	1590 mg/kg (Source: NLM_CIP)			
LD50 oral	3000 mg/kg bodyweight			
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)			
Triplal (Vertocitral) (68039-49-6)				
LD50 oral	3900 mg/kg bodyweight			
Benzyl alcohol (100-51-6)				
LD50 oral rat	1230 mg/kg (Source: NLM_CIP)			
LD50 oral	1620 mg/kg bodyweight			
LD50 dermal	2500 mg/kg bodyweight			
Linalool (78-70-6)				
LD50 oral	2790 mg/kg bodyweight			
Skin corrosion/irritation : Additional information :	Causes skin irritation. Causes skin irritation.			
	Causes serious eye irritation.			

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Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
d-Limonene (5989-27-5)	
IARC group	3 - Not classifiable
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: May be fatal if swallowed and enters airways.
Additional information	: Based on available data, the classification criteria are not met

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and : Based on available data, the classification criteria are not met symptoms

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - water : Hazardous to the aquatic environment, short-term : (acute)	Toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Not classified Toxic to aquatic life with long lasting effects.
d-Limonene (5989-27-5)	
LC50 - Fish [1]	0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: EPA)
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
Ethyl vanillin (121-32-4)	
LC50 - Fish [1]	81.4 – 94.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
Benzyl alcohol (100-51-6)	
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)

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Benzyl alcohol (100-51-6) 23 mg/l (Exposure time: 48 h - Species: water flea) EC50 - Crustacea [1] 23 mg/l (Species: Desmodesmus subspicatus) EC50 96h - Algae [1] 88.3 mg/l (Species: Desmodesmus subspicatus) 12.2. Persistence and degradability 88.3 mg/l (Species: Desmodesmus subspicatus) Cinnamon Apple #EU16008F Persistence and degradability May cause long-term adverse effects in the environment. Not established. 12.3. Bioaccumulative potential Cinnamon Apple #EU16008F May cause long-term adverse effects in the environment. Not established. Bioaccumulative potential Not established. Cinnamic aldehyde (104-55-2) 2.1065 (at 25 °C) Partition coefficient n-octanol/water (Log Pow) 2.1065 (at 25 °C) d-Limonen (5989-27-5) 2.1065 (at 25 °C) Partition coefficient n-octanol/water (Log Pow) 4.38 (at 37 °C (at pH 7.2) Aldehyde C-14 (104-67-6) Partition coefficient n-octanol/water (Log Pow) Partition coefficient n-octanol/water (Log Pow) 3.6 (at 25 °C) Ethyl vanillin (121-32-4) Partition coefficient n-octanol/water (Log Pow)
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Persistence and degradability May cause long-term adverse effects in the environment. Not established. 12.3. Bioaccumulative potential Image: Comparison of the environment of the envis
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d-Limonene (5989-27-5) Partition coefficient n-octanol/water (Log Pow) 4.38 (at 37 °C (at pH 7.2) Aldehyde C-14 (104-67-6) Partition coefficient n-octanol/water (Log Pow) 3.6 (at 25 °C) Ethyl vanillin (121-32-4)
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Aldehyde C-14 (104-67-6) Partition coefficient n-octanol/water (Log Pow) 3.6 (at 25 °C) Ethyl vanillin (121-32-4)
Partition coefficient n-octanol/water (Log Pow) 3.6 (at 25 °C) Ethyl vanillin (121-32-4) Image: State of the state o
Ethyl vanillin (121-32-4)
Partition coefficient proctanol/water /Log Pow) 161 (at 25 °C)
Benzyl alcohol (100-51-6)
Partition coefficient n-octanol/water (Log Pow) 1.05
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Endocrine disrupting properties
No additional information available
12.7. Other adverse effects
Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations	
13.1. Waste treatment methods	
Waste treatment methods Product/Packaging disposal recommendations	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose of contents/container in accordance with local/national laws and regulations. Dispose in a safe manner in accordance with local/national regulations.
Additional information Ecology - waste materials	Handle empty containers with care because residual vapours are flammable.Avoid release to the environment.

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HP Code	• +	: HP3 - "Flammable:"						
	-	 – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; 						
		flammable pyrophoric liquid an	•					
		quantities, is liable to ignite within five minutes after coming into contact with air;						
		flammable solid waste: solid waste: solid was	,	ble or may cause or				
	 – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; 							
	-	 water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. 						
	-							
	S							
		• •	ing:" waste which contains one or more substances known to cause					
	S	sensitising effects to the skin or the respiratory organs.						
		P14 - "Ecotoxic:" waste which p		diate or delayed risks for one				
	0	r more sectors of the environme	ent					
SECTION 14: Transpo	rt information							
In accordance with ADR / IME	DG / IATA / ADN / RID							
ADR	IMDG	ΙΑΤΑ	ADN	RID				
14.1. UN number or ID n	umber							
1111 2082	1101 2002	1111 2002	1111 2082	1101 2002				

UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox)	Environmentally hazardous substance, liquid, n.o.s. (Verdox)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox)
Transport document descr	-			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox), 9, III, (E)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Verdox), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Verdox), 9, III
14.3. Transport hazard o	class(es)			
9	9	9	9	9
14.4. Packing group		· · · · · · · · · · · · · · · · · · ·		·
Ш	III	III	Ш	III

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ADR	IMDG		ΙΑΤΑ	ADN	RID
14.5. Environmental haz	ards			•	
Dangerous for the environment: Yes			Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary informatio	n available	I			-
14.6. Special precautions	s for user				
Overland transport					
Classification code (ADR)		: M6			
Special provisions (ADR)		. Mo : 274, 335, 601, 375			
_imited quantities (ADR)		: 274, 333, 601, 373 : 5l			
Excepted quantities (ADR)		: E1			
Packing instructions (ADR) : P001, IBC03, LP01, R001					
Alixed packing provisions (ADR) : MP19					
Portable tank and bulk container instructions (ADR) : T4		-			
		: TP1, TP29			
ADR)					
		: LGBV			
	A.T.				

Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions	:	TP1, TP29
(ADR)		
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	:	CV13
and handling (ADR)		
Hazard identification number (Kemler No.)	:	90
Orange plates	:	00
		90
		3082
		5004

Tunnel restriction code (ADR)

Transport by sea

Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A

: E

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
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)
Special provisions (ADN)
Limited quantities (ADN)

: 274, 335, 375, 601

: M6

: 5 L

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Excepted quantities (ADN)	:	E1
Carriage permitted (ADN)	:	т
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)	:	Τ4
Portable tank and bulk container special provisions	:	TP1, TP29
(RID)		
Tank codes for RID tanks (RID)	:	LGBV
Transport category (RID)	:	3
Special provisions for carriage – Packages (RID)	:	W12
Special provisions for carriage - Loading, unloading	:	CW13, CW31
and handling (RID)		
Colis express (express parcels) (RID)	:	CE8
Hazard identification number (RID)	:	90

14.7. Maritime transport in bulk according to IMO instruments

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

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Water hazard class (WGK)	: WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1).
List of sensitizing substances (TRGS 907)	: Contains sensitizing substances according TRGS 907.

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: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
: A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment
: Triplal (Vertocitral) is listed
: Triplal (Vertocitral) is listed
: None of the components are listed
: None of the components are listed
: None of the components are listed
: Class III-1
: 50 liter
: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
: 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
1

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Other information

: None.

Full text of H- and EUH-statements:		
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 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.	

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Full text of H- and EUH-statements:	
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful 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.
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.