Pumpkin French Toast CC-16133

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830
Issue date: 10/27/2021 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Product name : Pumpkin French Toast CC-16133
UFI : G7A9-K4KN-X005-6MPU
Product code : CC-16133
Type of product : Perfumes, fragrances
Product group : Trade product

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

1.2.1. Relevant identified uses

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

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category 2 H319
Skin sensitisation, Category 1 H317
Full text of H-statements: see section 16

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes serious eye irritation.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP) : Warning
Contains : Clove leaf oil ; Cinnamic aldehyde; Coumarin crystals; beta-Caryophyllene; Eugenol
Hazard statements (CLP) : H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P264 - Wash hands, forearms and face thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

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]
Phenylmethanol	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630-38	2.5 – 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2, H319
Clove leaf oil	CAS-No.: 8000-34-8 EC-No.: 616-772-2	1.548 – 3.096	Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040-60	1.5 – 3	Eye Irrit. 2, H319
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 REACH-no: 01-2119935242-45	1.15885 – 2.3354	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Coumarin crystals	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756-26	0.875 – 1.75	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Oenanthic ether (Ethyl heptanoate)	CAS-No.: 106-30-9 EC-No.: 203-382-9	0.25 – 0.5	Flam. Liq. 3, H226 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	0.18 – 0.36	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
beta-Caryophyllene	CAS-No.: 87-44-5 EC-No.: 201-746-1 REACH-no: 01-2120745237-53	0.09735 – 0.2832	Asp. Tox. 1, H304 Aquatic Chronic 4, H413 Skin Sens. 1B, H317

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802-33	0.04425 – 0.177	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Furfural	CAS-No.: 98-01-1 EC-No.: 202-627-7 EC Index-No.: 605-010-00-4	0.075 – 0.15	Flam. Liq. 3, H226 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 3, H412
Dipropylene glycol monomethyl ether substance with a Community workplace exposure limit	CAS-No.: 34590-94-8 EC-No.: 252-104-2	0 – 0.016	Not classified

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. 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 : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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

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

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

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

Phenylmethanol (100-51-6)	
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	40 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	45 mg/m³
HTP (OEL TWA) [2]	10 ppm

Phenylmethanol (100-51-6)	
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/m³
Chemical category	Skin notation
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	240 mg/m³
Slovenia - Occupational Exposure Limits	
OEL TWA	22 mg/m³
OEL TWA [ppm]	5 ppm
OEL STEL	44 mg/m³
OEL STEL [ppm]	10 ppm
Chemical category	Potential for cutaneous absorption
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	22 mg/m³ (aerosol, vapour)
MAK (OEL TWA) [2]	5 ppm (aerosol, vapour)
Chemical category	Skin notation

Furfural (98-01-1)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	20 mg/m³
MAK (OEL TWA) [ppm]	5 ppm
Chemical category	Skin notation, Group B Carcinogen
Belgium - Occupational Exposure Limits	
OEL TWA	8 mg/m³
OEL TWA [ppm]	2 ppm
Chemical category	Skin
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	8 mg/m³
GVI (OEL TWA) [2]	2 ppm
KGVI (OEL STEL)	20 mg/m³
KGVI (OEL STEL) [ppm]	5 ppm

Furfural (98-01-1)	
Chemical category	Skin notation
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	10 mg/m³
Chemical category	Potential for cutaneous absorption
Denmark - Occupational Exposure Limits	
OEL TWA [1]	7.9 mg/m³
OEL TWA [2]	2 ppm
Chemical category	Potential for cutaneous absorption
Estonia - Occupational Exposure Limits	
OEL TWA	8 mg/m³
OEL TWA [ppm]	2 ppm
OEL STEL	20 mg/m³
OEL STEL [ppm]	5 ppm
Chemical category	Skin notation
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	8 mg/m³
HTP (OEL TWA) [2]	2 ppm
HTP (OEL STEL)	20 mg/m³
HTP (OEL STEL) [ppm]	5 ppm
Chemical category	Potential for cutaneous absorption
France - Occupational Exposure Limits	
VLE (OEL C/STEL)	8 mg/m³
VLE (OEL C/STEL) [ppm]	2 ppm
Chemical category	Carcinogen category 2
France - Biological limit values	
BLV	200 mg/g creatinine Parameter: Total furoic acid - Medium: urine - Sampling time: end of shift (Background noise on non-exposed subjects)
Greece - Occupational Exposure Limits	
OEL TWA	20 mg/m³
OEL TWA [ppm]	5 ppm
OEL STEL	40 mg/m³
OEL STEL [ppm]	10 ppm
Chemical category	skin - potential for cutaneous absorption
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	8 mg/m³
CK (OEL STEL)	20 mg/m³
Chemical category	Sensitizer, Potential for cutaneous absorption
Ireland - Occupational Exposure Limits	
OEL TWA [1]	8 mg/m³

Furfural (98-01-1)	
OEL TWA [2]	2 ppm
OEL STEL	20 mg/m³
OEL STEL [ppm]	5 ppm
Chemical category	Potential for cutaneous absorption
Latvia - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	8 mg/m³
IPRV (OEL TWA) [ppm]	2 ppm
TPRV (OEL STEL)	20 mg/m³
TPRV (OEL STEL) [ppm]	5 ppm
Chemical category	Carcinogen, Skin notation
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	10 mg/m³
NDSCh (OEL STEL)	25 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA [ppm]	2 ppm
Chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans, skin - potential for cutaneous exposure
Romania - Occupational Exposure Limits	
OEL TWA	10 mg/m³
OEL TWA [ppm]	2.5 ppm
OEL STEL	15 mg/m³
OEL STEL [ppm]	4 ppm
Chemical category	C2
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	7.9 mg/m³
NPHV (OEL TWA) [2]	2 ppm
Chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	8 mg/m³
VLA-ED (OEL TWA) [2]	2 ppm
Chemical category	skin - potential for cutaneous absorption
Spain - Biological limit values	
BLV	200 mg/l Parameter: Furoic acid - Medium: urine - Sampling time: end of shift (with hydrolysis)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	8 mg/m³
NGV (OEL TWA) [ppm]	2 ppm
KTV (OEL STEL)	20 mg/m³

Furfural (98-01-1)	
KTV (OEL STEL) [ppm]	5 ppm
Chemical category	Skin notation
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	8 mg/m³
WEL TWA (OEL TWA) [2]	2 ppm
WEL STEL (OEL STEL)	20 mg/m³
WEL STEL (OEL STEL) [ppm]	5 ppm
WEL chemical category	Potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	8 mg/m³
Grenseverdi (OEL TWA) [2]	2 ppm
Korttidsverdi (OEL STEL)	16 mg/m³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	4 ppm (value calculated)
Chemical category	Skin notation
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	8 mg/m³
MAK (OEL TWA) [2]	2 ppm
Chemical category	Skin notation
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	0.2 ppm
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route
USA - ACGIH - Biological Exposure Indices	
BEI	200 mg/l Parameter: Furoic acid with hydrolysis - Medium: urine - Sampling time: end of shift (nonspecific)

Dipropylene glycol monomethyl ether (34590-94-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	308 mg/m³
IOEL TWA [ppm]	50 ppm
Notes	Possibility of significant uptake through the skin
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	307 mg/m³ (mixed isomers)
MAK (OEL TWA) [ppm]	50 ppm (mixed isomers)
MAK (OEL STEL)	614 mg/m³ (isomers mixtures)
MAK (OEL STEL) [ppm]	100 ppm (isomers mixtures)
Chemical category	Skin notation
Belgium - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm

Dipropylene glycol monomethyl ether (34590-94-8)	
Chemical category	Skin, Skin notation
Bulgaria - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	308 mg/m³
GVI (OEL TWA) [2]	50 ppm
Chemical category	Skin notation
Cyprus - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Skin-potential for cutaneous absorption
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	270 mg/m³
Chemical category	Potential for cutaneous absorption
Denmark - Occupational Exposure Limits	
OEL TWA [1]	309 mg/m³
OEL TWA [2]	50 ppm
Chemical category	Potential for cutaneous absorption
Estonia - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Skin notation
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	310 mg/m³
HTP (OEL TWA) [2]	50 ppm
Chemical category	Potential for cutaneous absorption
France - Occupational Exposure Limits	
VME (OEL TWA)	308 mg/m³ (restrictive limit)
VME (OEL TWA) [ppm]	50 ppm (restrictive limit)
Chemical category	Risk of cutaneous absorption
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	310 mg/m³ (isomer mixture)
AGW (OEL TWA) [2]	50 ppm (isomer mixture)
Gibraltar - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Skin notation

Dipropylene glycol monomethyl ether (34590-94-8)	
Greece - Occupational Exposure Limits	
OEL TWA	600 mg/m³
OEL TWA [ppm]	100 ppm
OEL STEL	900 mg/m³
OEL STEL [ppm]	150 ppm
Chemical category	skin - potential for cutaneous absorption
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	308 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	308 mg/m³ ((2-Methoxymethylethoxy)propanol)
OEL TWA [2]	50 ppm ((2-Methoxymethylethoxy)propanol)
OEL STEL	924 mg/m³ (calculated (2-(2-Methoxypropoxy)-1-propanol)
OEL STEL [ppm]	150 ppm (calculated (2-(2-Methoxypropoxy)-1-propanol)
Chemical category	Potential for cutaneous absorption
Italy - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	skin - potential for cutaneous absorption
Latvia - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	skin - potential for cutaneous exposure
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	300 mg/m³ (2-(2-Methoxypropoxy)-propanol)
IPRV (OEL TWA) [ppm]	50 ppm (2-(2-Methoxypropoxy)-propanol)
TPRV (OEL STEL)	450 mg/m³ (2-(2-Methoxypropoxy)-propanol)
TPRV (OEL STEL) [ppm]	75 ppm (2-(2-Methoxypropoxy)-propanol)
Chemical category	Skin notation
Luxembourg - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Possibility of significant uptake through the skin
Malta - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Possibility of significant uptake through the skin
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	300 mg/m³

Dipropylene glycol monomethyl ether (34590-94-8)	
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	240 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol and 2-(2-Methoxy-1-methylethoxy)propan-1-ol)
NDSCh (OEL STEL)	480 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol, 2-(2-Methoxy-1-methylethoxy)propan-1-ol)
Portugal - Occupational Exposure Limits	
OEL TWA	308 mg/m³ (indicative limit value)
OEL TWA [ppm]	50 ppm (indicative limit value)
OEL STEL [ppm]	150 ppm
Chemical category	skin - potential for cutaneous exposure indicative limit value
Romania - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Skin notation
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	308 mg/m³
NPHV (OEL TWA) [2]	50 ppm
Chemical category	Potential for cutaneous absorption
Slovenia - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
OEL STEL	308 mg/m³
OEL STEL [ppm]	50 ppm
Chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	308 mg/m³ (indicative limit value)
VLA-ED (OEL TWA) [2]	50 ppm (indicative limit value)
Chemical category	skin - potential for cutaneous absorption
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	300 mg/m³
NGV (OEL TWA) [ppm]	50 ppm
KTV (OEL STEL)	450 mg/m³
KTV (OEL STEL) [ppm]	75 ppm
Chemical category	Skin notation
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	308 mg/m³
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	924 mg/m³ (calculated)
WEL STEL (OEL STEL) [ppm]	150 ppm (calculated)
WEL chemical category	Potential for cutaneous absorption

Dipropylene glycol monomethyl ether (34590-94-8)	
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	300 mg/m³
Grenseverdi (OEL TWA) [2]	50 ppm
Korttidsverdi (OEL STEL)	375 mg/m³ (value calculated)
Korttidsverdi (OEL STEL) [ppm]	75 ppm (value calculated)
Chemical category	Skin notation
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	300 mg/m³ (aerosol, vapour)
MAK (OEL TWA) [2]	50 ppm (aerosol, vapour)
KZGW (OEL STEL)	300 mg/m³ (aerosol, vapour)
KZGW (OEL STEL) [ppm]	50 ppm (aerosol, vapour)
Turkey - Occupational Exposure Limits	
OEL TWA	308 mg/m³
OEL TWA [ppm]	50 ppm
Chemical category	Skin notation
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	100 ppm
ACGIH OEL STEL [ppm]	150 ppm
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route

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.

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	:	85 °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	:	0.924
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

Phenylmethanol (100-51-6)	
LD50 oral rat	1230 mg/kg
LD50 oral	1620 mg/kg bodyweight
LD50 dermal	2500 mg/kg bodyweight

Cinnamic aldehyde (104-55-2)	
LD50 oral rat	2220 mg/kg
LD50 oral	2200 mg/kg bodyweight
LD50 dermal rabbit	1260 mg/kg
LD50 dermal	1100 mg/kg bodyweight

Oenanthic ether (Ethyl heptanoate) (106-30-9)	
LD50 oral rat	> 34640 mg/kg

Vanillin (121-33-5)	
LD50 dermal rabbit	> 5010 mg/kg

Coumarin crystals (91-64-5)	
LD50 oral rat	> 5000 mg/kg
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	293 mg/kg

Furfural (98-01-1)	
LD50 oral rat	125 mg/kg
LD50 oral	100 mg/kg bodyweight
LD50 dermal rabbit	500 – 1000 mg/kg
LD50 dermal	1100 mg/kg bodyweight
LC50 Inhalation - Rat	756 mg/m³ (Exposure time: 1 h)
LC50 Inhalation - Rat (Vapours)	1 mg/l/4h

Benzyl benzoate (120-51-4)	
LD50 oral rat	500 mg/kg
LD50 oral	1500 mg/kg bodyweight

Benzyl benzoate (120-51-4)	
LD50 dermal rabbit	4000 mg/kg
LD50 dermal	4000 mg/kg bodyweight

Dipropylene glycol monomethyl ether (34590-94-8)	
LD50 oral rat	5.35 g/kg
LD50 dermal rabbit	9500 mg/kg

Eugenol (97-53-0)	
LD50 oral rat	1930 mg/kg
LD50 oral	2500 mg/kg bodyweight

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

Skin corrosion/irritation : Not classified

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

Coumarin crystals (91-64-5)	
IARC group	3 - Not classifiable

Furfural (98-01-1)	
IARC group	3 - Not classifiable

Eugenol (97-53-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

Furfural (98-01-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Phenylmethanol (100-51-6)	
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Phenylmethanol (100-51-6)	
EC50 - Crustacea [1]	23 mg/l (Exposure time: 48 h - Species: water flea)
Vanillin (121-33-5)	
LC50 - Fish [1]	53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2]	88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
NOEC (acute)	10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])
Furfural (98-01-1)	
LC50 - Fish [1]	13.4 – 19.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
LC50 - Fish [2]	16.79 – 26.35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
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
Dipropylene glycol monomethyl ether (34590-94-8)	
LC50 - Fish [1]	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Eugenol (97-53-0)	
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static])

12.2. Persistence and degradability

Benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Phenylmethanol (100-51-6)	
Partition coefficient n-octanol/water (Log Pow)	1.1
Cinnamic aldehyde (104-55-2)	
Partition coefficient n-octanol/water (Log Pow)	2.22 (at 18 °C)
Vanillin (121-33-5)	
Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)
Furfural (98-01-1)	
Partition coefficient n-octanol/water (Log Pow)	0.67
Benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	4
Bioaccumulative potential	Not established.
Dipropylene glycol monomethyl ether (34590-94-8)	
Partition coefficient n-octanol/water (Log Pow)	-0.064 (at 20 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : Not applicable

ADN

Transport hazard class(es) (ADN) : Not applicable

RID

Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	: Not applicable

14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

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(b)	Phenylmethanol ; Clove leaf oil ; Cinnamic aldehyde
3(c)	Cinnamic aldehyde

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

15.1.2. National regulations

France	
Occupational diseases	
Code	**Description**
RG 74	Occupational disorders caused by furfural and furfuryl alcohol

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 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)
List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed
SZW-lijst van mutagene stoffen : None of the components 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
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

Abbreviations and acronyms	
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. 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
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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.
H332	Harmful if inhaled.

Full text of H- and EUH-statements	
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

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.