FRENCH PEAR FR30999

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 5/28/2025 Version: 1.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	FRENCH PEAR FR30999
UFI		
Product code	:	FR30999
Type of product	:	Perfumes, fragrances
Product group	:	Trade product

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

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

1.3. Details of the supplier of the safety data sheet

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects. May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07

Signal word (CLP)	:	Warning
Contains	:	Cinnamic aldehyde; Eugenol; Geranyl acetate; Hexyl cinnamic aldehyde; Neryl acetate; d-Limonene; COUMARIN; Triplal (Vertocitral); Veratryl aldehyde (Veratraldehyde)

Hazard statements (CLP) : H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H412 - Harmful 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.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards

Contains no PBT and/or 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 substance(s) are 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

3.2. 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	3.7 – 7.3	Aquatic Chronic 2, H411
Geranyl acetate	CAS-No.: 105-87-3 EC-No.: 203-341-5 REACH-no: 01-2119973480-35	3.3 – 6.6	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 EC Index-No.: 606-155-00-6 REACH-no: 01-2119935242-45	2.8 – 5.5	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802-33	2.8 – 5.5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
Neryl acetate	CAS-No.: 141-12-8 EC-No.: 205-459-2	1.5 – 2.9	Skin Sens. 1B, H317
Citronellyl acetate (mixed Isomers)	CAS-No.: 150-84-5 EC-No.: 205-775-0	1.2 – 2.4	Aquatic Chronic 2, H411 Skin Irrit. 2, H315
(R)-p-mentha-1,8-diene; 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	0.9 – 1.8	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2(3H)-Furanone, 5-heptyldihydro-	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333-34	0.9 – 1.7	Aquatic Chronic 3, H412
Ethyl maltol	CAS-No.: 4940-11-8 EC-No.: 225-582-5	0.8 – 1.66	Acute Tox. 4 (Oral), H302
isobutyl acetate substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR)	CAS-No.: 110-19-0 EC-No.: 203-745-1 EC Index-No.: 607-026-00-7	0.8 – 1.5	Flam. Liq. 2, H225 STOT SE 3, H336
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	0.7 – 1.4	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Ethylene brassylate	CAS-No.: 105-95-3 EC-No.: 203-347-8 REACH-no: 01-2119976314-33	0.7 – 1.3	Aquatic Chronic 2, H411
Butylated hydroxytoluene (BHT) crystals substance with national workplace exposure limit(s) (AT, BE, BG, DE, DK, ES, FI, FR, GB, GR, HR, IE, PT, SI, CH)	CAS-No.: 128-37-0 EC-No.: 204-881-4 REACH-no: 01-2119480433-40	0.5 – 0.9	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	0.4 – 0.7755	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1 EC Index-No.: 605-043-00-4	0.3 – 0.526	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
isopentyl acetate substance with national workplace exposure limit(s) (AT, BE, BG, CY, DE, DK, EE, ES, FI, FR, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 123-92-2 EC-No.: 204-662-3 EC Index-No.: 607-130-00-2 REACH-no: 01-2119548408-32	0.2 – 0.4	Flam. Liq. 3, H226
Diphenyl oxide substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 101-84-8 EC-No.: 202-981-2 REACH-no: 01-2119472545-33	0.2 – 0.3	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756-26	0.1 – 0.285	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
Veratryl aldehyde (Veratraldehyde)	CAS-No.: 120-14-9 EC-No.: 204-373-2	0.1 – 0.21	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Amyl formate substance with national workplace exposure limit(s) (LT, LV)	CAS-No.: 638-49-3 EC-No.: 211-340-6 EC Index-No.: 607-696-00-0	0.1 – 0.2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Alcohol C-10 substance with national workplace exposure limit(s) (BG, DE, LT, LV, RO, CH)	CAS-No.: 112-30-1 EC-No.: 203-956-9	0 – 0.0112	Aquatic Chronic 3, H412
Aldehyde C-6 substance with national workplace exposure limit(s) (FI, PL)	CAS-No.: 66-25-1 EC-No.: 200-624-5	0 – 0.0028	Flam. Liq. 3, H226
butyric acid substance with national workplace exposure limit(s) (BG, LT, LV, RO)	CAS-No.: 107-92-6 EC-No.: 203-532-3 EC Index-No.: 607-135-00-X	0 – 0.0001	Skin Corr. 1B, H314
Caproic acid substance with national workplace exposure limit(s) (BG, LT, LV)	CAS-No.: 142-62-1 EC-No.: 205-550-7	0 – 0.0001	Skin Corr. 1C, H314 Eye Dam. 1, H318

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits (%)**
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 EC Index-No.: 606-155-00-6 REACH-no: 01-2119935242-45	(0.001 < C < 0.01) EUH208 (0.01 ≤ C < 0.1) Skin Sens. 1; H317 (0.1 ≤ C < 100) Skin Sens. 1A; H317

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 general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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 : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. Wash with plenty of water/…. Get medical advice/attention. Wash contaminated clothing before reuse. 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. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Irritation. 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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

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

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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

For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal 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 containment and cleaning up

Methods for cleaning up : 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

See Section 8. Exposure controls and personal protection. 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. 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. Avoid breathing dust/fume/gas/mist/vapours/spray. No open flames. No smoking. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	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. Keep in fireproof place. Store in a well-ventilated place. Keep cool.
Incompatible products	:	Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight. Heat sources.
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.

Germany

Storage class (LGK, TRGS 510)	:	LGK 12 - Non-combustible liquids
Joint storage table	:	

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for	:	LGK 1, LGK 6.2, LGK 7
Joint storage with restrictions permitted for	:	LGK 4.1A, LGK 4.3, LGK 5.1C
Joint storage permitted for	:	LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

Switzerland

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

isobutyl acetate (110-19-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	241 mg/m³ (Butyl acetates)
	50 ppm (Butyl acetates)
MAK (OEL STEL)	480 mg/m³ (Butyl acetate)
	100 ppm (Butyl acetate)
Belgium - Occupational Exposure Limits	
OEL TWA	238 mg/m³
	50 ppm
OEL STEL	712 mg/m³
	150 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm

isobutyl acetate (110-19-0)	
OEL STEL	723 mg/m³
	150 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	241 mg/m³
	50 ppm
KGVI (OEL STEL)	723 mg/m³
	150 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	241 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	241 mg/m³ (Butyl acetate, all isomers)
	50 ppm (Butyl acetate, all isomers)
OEL STEL	723 mg/m³
	150 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	240 mg/m³ (Butyl acetate)
	50 ppm (Butyl acetate)
HTP (OEL STEL)	725 mg/m³ (Butyl acetate)
	150 ppm (Butyl acetate)
France - Occupational Exposure Limits	
VME (OEL TWA)	241 mg/m³ (restrictive limit)
	50 ppm (restrictive limit)
VLE (OEL C/STEL)	723 mg/m³ (restrictive limit)
	150 ppm (restrictive limit)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	300 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	62 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)

isobutyl acetate (110-19-0)	
Greece - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	241 mg/m³
CK (OEL STEL)	723 mg/m³
OEL chemical category	Sensitizer
Ireland - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³ (calculated)
	150 ppm (calculated)
Italy - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	241 mg/m³
	50 ppm
TPRV (OEL STEL)	723 mg/m³
	150 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Malta - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	241 mg/m³

isobutyl acetate (110-19-0)	
	50 ppm
TGG-15min (OEL STEL)	723 mg/m³
	150 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	240 mg/m³
NDSCh (OEL STEL)	720 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	241 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
OEL STEL	723 mg/m³ (indicative limit value)
	150 ppm (indicative limit value)
Romania - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	241 mg/m³
	50 ppm
NPHV (OEL C)	723 mg/m³
Slovenia - Occupational Exposure Limits	
OEL TWA	241 mg/m³
	50 ppm
OEL STEL	723 mg/m³
	150 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	241 mg/m³
	50 ppm
VLA-EC (OEL STEL)	723 mg/m³
	150 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	241 mg/m³
	50 ppm
KGV (OEL STEL)	723 mg/m³
	150 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	724 mg/m³
	150 ppm
WEL STEL (OEL STEL)	903 mg/m³

isobutyl acetate (110-19-0)	
	187 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	241 mg/m³
	50 ppm
Korttidsverdi (OEL STEL)	723 mg/m³ (value from the regulation)
	150 ppm (value from the regulation)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	240 mg/m³
	50 ppm
KZGW (OEL STEL)	720 mg/m³
	150 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	50 ppm (Butyl acetates, all isomers)
ACGIH OEL STEL	150 ppm (Butyl acetates, all isomers)

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	140 mg/m³
	25 ppm
HTP (OEL STEL)	280 mg/m³
	50 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	28 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	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
	5 ppm
OEL STEL	112 mg/m³
	20 ppm
OEL chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	168 mg/m³
	30 ppm
OEL chemical category	Sensitizer, skin - potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	140 mg/m³
	25 ppm

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Korttidsverdi (OEL STEL)	175 mg/m³ (value calculated)
	37.5 ppm (value calculated)
OEL chemical category	Allergenic substance
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	40 mg/m³
	7 ppm
KZGW (OEL STEL)	80 mg/m³
	14 ppm
OEL chemical category	Sensitizer

Diphenyl oxide (101-84-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	7 mg/m³
	1 ppm
IOEL STEL	14 mg/m³
	2 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	7 mg/m³
	1 ppm
MAK (OEL STEL)	14 mg/m³
	2 ppm
Belgium - Occupational Exposure Limits	
OEL TWA	7 mg/m³ (vapor)
	1 ppm (vapor)
OEL STEL	14 mg/m³ (vapor)
	2 ppm (vapor)
Bulgaria - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	7 mg/m³
	1 ppm
KGVI (OEL STEL)	14 mg/m³
	2 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³

Diphenyl oxide (101-84-8)	
	2 ppm
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	5 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	7 mg/m³
	1 ppm
HTP (OEL STEL)	14 mg/m³
	2 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	7 mg/m³ (indicative limit)
	1 ppm (indicative limit)
VLE (OEL C/STEL)	14 mg/m³ (indicative limit)
	2 ppm (indicative limit)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	7.1 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-vapor)
	1 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-vapor)
Gibraltar - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	200 ppm
Greece - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	7 mg/m³

Diphenyl oxide (101-84-8)	
CK (OEL STEL)	14 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	7 mg/m³ (vapour)
	1 ppm (vapour)
OEL STEL	14 mg/m³ (vapor)
	2 ppm (vapor)
Italy - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	7 mg/m³
	1 ppm
TPRV (OEL STEL)	14 mg/m³
	2 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Malta - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	7 mg/m³
	1 ppm
TGG-15min (OEL STEL)	14 mg/m³
	2 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	7 mg/m³
NDSCh (OEL STEL)	14 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	7 mg/m³ (indicative limit value)
	1 ppm (indicative limit value-vapor)
OEL STEL	14 mg/m³ (indicative limit value)

Diphenyl oxide (101-84-8)	
	2 ppm (indicative limit value-vapor)
Romania - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	7 mg/m³
	1 ppm
NPHV (OEL C)	14 mg/m³
Slovenia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	1 ppm
OEL STEL	14 mg/m³
	2 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	7.1 mg/m³ (vapor)
	1 ppm (vapor)
VLA-EC (OEL STEL)	14.2 mg/m³ (vapor)
	2 ppm (vapor)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	7 mg/m³
	1 ppm
KGV (OEL STEL)	14 mg/m³
	2 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	7 mg/m³
	1 ppm
WEL STEL (OEL STEL)	14 mg/m³
	2 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	7 mg/m³
	1 ppm
Korttidsverdi (OEL STEL)	14 mg/m³ (value from the regulation)
	2 ppm (value from the regulation)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	7 mg/m³ (aerosol, vapour)
	1 ppm (aerosol, vapour)
KZGW (OEL STEL)	14 mg/m³ (aerosol, vapour)

Diphenyl oxide (101-84-8)	
	2 ppm (aerosol, vapour)
OEL chemical category	Category 2 reproductive toxin
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 ppm (vapor)
ACGIH OEL STEL	2 ppm (vapor fraction)

isopentyl acetate (123-92-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	270 mg/m³
	50 ppm
IOEL STEL	540 mg/m³
	100 ppm
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	270 mg/m³ (Pentyl acetate (all isomers))
	50 ppm (Pentyl acetate (all isomers))
MAK (OEL STEL)	540 mg/m³ (Pentylacetate)
	100 ppm (Pentylacetate)
Belgium - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Bulgaria - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	270 mg/m³
	50 ppm
KGVI (OEL STEL)	540 mg/m³
	100 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Denmark - Occupational Exposure Limits	
OEL TWA	271 mg/m³ (Amyl acetate, all isomers)
	50 ppm (Amyl acetate, all isomers)

isopentyl acetate (123-92-2)	
OEL STEL	540 mg/m³
	100 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	270 mg/m³ (Pentyl acetate)
	50 ppm (Pentyl acetate)
HTP (OEL STEL)	540 mg/m³
	100 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	270 mg/m³ (restrictive limit)
	50 ppm (restrictive limit)
VLE (OEL C/STEL)	540 mg/m³ (restrictive limit)
	100 ppm (restrictive limit)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	270 mg/m³
	50 ppm
Gibraltar - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Greece - Occupational Exposure Limits	
OEL TWA	530 mg/m³
	100 ppm
OEL STEL	800 mg/m³
	150 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	270 mg/m³
CK (OEL STEL)	540 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	260 mg/m³
	50 ppm
OEL STEL	520 mg/m³
	100 ppm

isopentyl acetate (123-92-2)	
Italy - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	270 mg/m³
	50 ppm
TPRV (OEL STEL)	540 mg/m³
	100 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Malta - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Netherlands - Occupational Exposure Limits	
TGG-15min (OEL STEL)	530 mg/m³
	98.1 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	250 mg/m³
NDSCh (OEL STEL)	500 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	270 mg/m³ (indicative limit value)
	50 ppm (indicative limit value (Pentyl acetate, all isomers)
OEL STEL	540 mg/m³ (indicative limit value)
	100 ppm (indicative limit value)
Romania - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm

isopentyl acetate (123-92-2)	
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	270 mg/m³
	50 ppm
NPHV (OEL C)	540 mg/m³
Slovenia - Occupational Exposure Limits	
OEL TWA	270 mg/m³
	50 ppm
OEL STEL	540 mg/m³
	100 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	270 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
VLA-EC (OEL STEL)	540 mg/m³
	100 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	270 mg/m³
	50 ppm
KGV (OEL STEL)	540 mg/m³
	100 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	260 mg/m³
	50 ppm
Korttidsverdi (OEL STEL)	325 mg/m³ (value calculated)
	75 ppm (value calculated)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	260 mg/m³ (Pentyl acetate all isomers)
	50 ppm (Pentyl acetate all isomers)
KZGW (OEL STEL)	260 mg/m³ (Pentyl acetate all isomers)
	50 ppm (Pentyl acetate all isomers)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	50 ppm (Pentyl acetate, all isomers)
ACGIH OEL STEL	100 ppm (Pentyl acetate, all isomers)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m³
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (aerosol and vapor)
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m³

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
OEL STEL	50 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	10 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	10 mg/m³
OEL STEL	20 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	10 mg/m³
HTP (OEL STEL)	20 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m³
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	10 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	2 mg/m³
OEL STEL	6 mg/m³ (calculated)
Portugal - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (inhalable fraction; vapor)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Slovenia - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
OEL STEL	40 mg/m³ (inhalable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	10 mg/m³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	10 mg/m³
WEL STEL (OEL STEL)	30 mg/m³ (calculated)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m³ (no elevated carcinogenic risk by keeping the MAK-value-aerosol, inhalable dust, vapour)
KZGW (OEL STEL)	40 mg/m³ (no increased cancer risk by adhering to TWA values-aerosol, inhalable dust, vapour)
OEL chemical category	Category C1B carcinogen carcinogenic with threshold value
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m³ (inhalable fraction and vapor)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

butyric acid (107-92-6)	
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Latvia - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	10 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	15 mg/m³
	4 ppm
OEL STEL	30 mg/m³
	8 ppm

Alcohol C-10 (112-30-1)	
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	66 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	10 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Latvia - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	10 mg/m³
Romania - Occupational Exposure Limits	
OEL TWA	100 mg/m³
	15 ppm
OEL STEL	200 mg/m³
	30 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	66 mg/m³ (aerosol, vapour)
	10 ppm (aerosol, vapour)
KZGW (OEL STEL)	66 mg/m³ (aerosol, vapour)
	10 ppm (aerosol, vapour)

Caproic acid (142-62-1)	
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m³
Latvia - Occupational Exposure Limits	
OEL TWA	5 mg/m³

Caproic acid (142-62-1)	
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m³

Amyl formate (638-49-3)	
Latvia - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Lithuania - Occupational Exposure Limits	
TPRV (OEL STEL)	10 mg/m³
OEL chemical category	Skin notation

Aldehyde C-6 (66-25-1)	
Finland - Occupational Exposure Limits	
HTP (OEL STEL)	42 mg/m³
	10 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	40 mg/m³
NDSCh (OEL STEL)	80 mg/m³

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:
Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.
Personal protective equipment symbol(s):

Eye and face protection

Eye protection:
Chemical goggles or safety glasses. Safety glasses

Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Wear protective gloves.

Respiratory protection

Respiratory protection:
Wear appropriate mask

Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.
Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Conforms to standard.
Odour	:	characteristic.
Odour threshold	:	Not available
Melting point	:	Not applicable
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not applicable,Combustible liquid
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	65 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	0.007563807 mm Hg (calculated value)
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

Other safety characteristics

VOC content	:	16.4373 % (calculated value)(CARB VOC) (%w/w)

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.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Verdox (88-41-5)	
LD50 oral rat	4600 mg/kg (Source: NLM_CIP)
LD50 oral	4600 mg/kg

Cinnamic aldehyde (104-55-2)	
LD50 oral rat	2220 mg/kg (Source: NLM_CIP)
LD50 oral	2220 mg/kg
LD50 dermal rabbit	1260 mg/kg (Source: EPA_HPV)
LD50 dermal	1260 mg/kg

Eugenol (97-53-0)	
LD50 oral rat	1930 mg/kg (Source: NZ_CCID)
LD50 oral	2500 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.58 mg/l/4h

Geranyl acetate (105-87-3)	
LD50 oral rat	6330 mg/kg (Source: NLM_CIP)

Hexyl cinnamic aldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)
LD50 oral	3100 mg/kg bodyweight
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPV)
LC50 Inhalation - Rat	> 5 mg/l/4h

2(3H)-Furanone, 5-heptyldihydro- (104-67-6)	
LD50 oral rat	18500 mg/kg (Source: NLM_CIP)
LD50 dermal rat	> 2000 mg/kg (Source: ECHA)

Ethylene brassylate (105-95-3)	
LD50 oral rat	> 5000 mg/kg (Source: ECHA)
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA)

isobutyl acetate (110-19-0)	
LD50 oral rat	15400 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	> 17400 mg/kg (Source: NLM_CIP)

Neryl acetate (141-12-8)	
LD50 oral rat	> 2000 mg/kg (Source: ECHA)
LD50 dermal rabbit	> 6 ml/kg (Source: ECHA_API)

Ethyl maltol (4940-11-8)	
LD50 oral rat	1150 mg/kg (Source: NLM_CIP)
LD50 oral	1200 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg (Source: CHEMVIEW)

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
LD50 dermal rabbit	> 5 g/kg (Source: CHEMVIEW)

Citronellyl acetate (mixed Isomers) (150-84-5)	
LD50 oral rat	6800 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)

Diphenyl oxide (101-84-8)	
LD50 oral rat	2450 mg/kg (Source: NLM_CIP)
LD50 oral	2830 mg/kg bodyweight
LD50 dermal rabbit	> 7940 mg/kg (Source: NLM_CIP)
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
LD50 oral rat	> 2930 mg/kg (Source: EPA_HPV)
LD50 dermal rat	> 2000 mg/kg (Source: JAPAN_GHS)

COUMARIN (91-64-5)	
LD50 oral rat	> 5000 mg/kg (Source: JAPAN_GHS)
LD50 dermal rat	293 mg/kg (Source: ECHA_API)

Triplal (Vertocitral) (68039-49-6)	
LD50 oral	2330 mg/kg

Veratryl aldehyde (Veratraldehyde) (120-14-9)	
LD50 oral rat	2 g/kg (Source: NLM_CIP)
LD50 oral	2000 mg/kg bodyweight

benzyl benzoate (120-51-4)	
LD50 oral rat	> 2000 mg/kg (Source: ECHA_API)
LD50 oral	1160 mg/kg bodyweight
LD50 dermal rabbit	4000 mg/kg (Source: NLM_CIP)

butyric acid (107-92-6)	
LD50 oral rat	2 g/kg (Source: NLM_CIP)
LD50 oral	1630 mg/kg bodyweight
LD50 dermal rabbit	530 mg/kg (Source: NLM_HSDB)

Alcohol C-10 (112-30-1)	
LD50 oral rat	4720 mg/kg (Source: NZ_CCID)
LD50 dermal rat	> 5000 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	> 71 mg/l (Exposure time: 1 h Source: ECHA_API)

Caproic acid (142-62-1)	
LD50 oral rat	3 g/kg (Source: NLM_HSDB)
LD50 dermal rabbit	630 mg/kg (Source: NLM_HSDB)

Amyl formate (638-49-3)	
LD50 oral rat	> 5 g/kg (Source: NLM_CIP)

Amyl formate (638-49-3)	
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)

Aldehyde C-6 (66-25-1)	
LD50 oral rat	4890 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 8100 mg/kg (Source: ECHA_API)

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

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

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
IARC group	3 - Not classifiable

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
IARC group	3 - Not classifiable

COUMARIN (91-64-5)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

isobutyl acetate (110-19-0)	
STOT-single exposure	May cause drowsiness or dizziness.

Amyl formate (638-49-3)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Hydrocarbon	Yes

benzyl benzoate (120-51-4)	
Viscosity, kinematic	7.456 mm²/s

11.2. Information on other hazards

Other information

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

SECTION 12: Ecological information

12.1. Toxicity

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

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

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

Eugenol (97-53-0)	
LC50 - Fish [1]	13 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
2(3H)-Furanone, 5-heptyldihydro- (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
isobutyl acetate (110-19-0)	
LC50 - Fish [1]	17 mg/l (Exposure time: 96 h - Species: Oryzias latipes Source: ECHA)
Ethyl maltol (4940-11-8)	
LC50 - Fish [1]	> 85 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: ECHA)
(R)-p-mentha-1,8-diene; 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)
Citronellyl acetate (mixed Isomers) (150-84-5)	
LC50 - Fish [1]	6.1 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
Butylated hydroxytoluene (BHT) crystals (128-37-0)	
EC50 72h - Algae [1]	6 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 72h - Algae [2]	> 0.42 mg/l (Species: Desmodesmus subspicatus)
benzyl benzoate (120-51-4)	
LC50 - Fish [1]	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
NOEC (chronic)	0.168 mg/l
butyric acid (107-92-6)	
EC50 72h - Algae [1]	46.7 mg/l (Species: Desmodesmus subspicatus)
Alcohol C-10 (112-30-1)	
LC50 - Fish [1]	2.2 – 2.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	4.12 – 6.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
EC50 - Crustacea [1]	3 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Caproic acid (142-62-1)	
LC50 - Fish [1]	306 – 334 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
Aldehyde C-6 (66-25-1)	
LC50 - Fish [1]	12 – 16.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)

12.2. Persistence and degradability

FRENCH PEAR FR30999	
Persistence and degradability	Not established.
Verdox (88-41-5)	
Persistence and degradability	Rapidly degradable
Cinnamic aldehyde (104-55-2)	
Persistence and degradability	Rapidly degradable
Eugenol (97-53-0)	
Persistence and degradability	Rapidly degradable
Geranyl acetate (105-87-3)	
Persistence and degradability	Rapidly degradable
Hexyl cinnamic aldehyde (101-86-0)	
Persistence and degradability	Rapidly degradable
2(3H)-Furanone, 5-heptyldihydro- (104-67-6)	
Persistence and degradability	Rapidly degradable
Ethylene brassylate (105-95-3)	
Persistence and degradability	Rapidly degradable
isobutyl acetate (110-19-0)	
Persistence and degradability	Rapidly degradable
Neryl acetate (141-12-8)	
Persistence and degradability	Rapidly degradable
Ethyl maltol (4940-11-8)	
Persistence and degradability	Rapidly degradable
(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Persistence and degradability	Rapidly degradable
Citronellyl acetate (mixed Isomers) (150-84-5)	
Persistence and degradability	Rapidly degradable
Diphenyl oxide (101-84-8)	
Persistence and degradability	Rapidly degradable
isopentyl acetate (123-92-2)	
Persistence and degradability	Rapidly degradable
Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Persistence and degradability	Rapidly degradable
COUMARIN (91-64-5)	
Persistence and degradability	Rapidly degradable
Triplal (Vertocitral) (68039-49-6)	
Persistence and degradability	Rapidly degradable

Veratryl aldehyde (Veratraldehyde) (120-14-9)	
Persistence and degradability	Rapidly degradable

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

butyric acid (107-92-6)	
Persistence and degradability	Rapidly degradable

Alcohol C-10 (112-30-1)	
Persistence and degradability	Rapidly degradable

Caproic acid (142-62-1)	
Persistence and degradability	Rapidly degradable

Amyl formate (638-49-3)	
Persistence and degradability	Rapidly degradable

Aldehyde C-6 (66-25-1)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

FRENCH PEAR FR30999	
Bioaccumulative potential	Not established.

Cinnamic aldehyde (104-55-2)	
Partition coefficient n-octanol/water (Log Pow)	2.1065 (at 25 °C)

Eugenol (97-53-0)	
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)

Geranyl acetate (105-87-3)	
Partition coefficient n-octanol/water (Log Pow)	4.04

2(3H)-Furanone, 5-heptyldihydro- (104-67-6)	
Partition coefficient n-octanol/water (Log Pow)	3.6 (at 25 °C)

Ethylene brassylate (105-95-3)	
Partition coefficient n-octanol/water (Log Pow)	4.3 (at 25 °C (at pH 6.4-7)

isobutyl acetate (110-19-0)	
BCF - Fish [1]	(no significant bioconcentration)
Partition coefficient n-octanol/water (Log Pow)	2.3 (at 25 °C (at pH 7)

Neryl acetate (141-12-8)	
Partition coefficient n-octanol/water (Log Pow)	3.98 (at 37 °C (at pH 7.2)

Ethyl maltol (4940-11-8)	
Partition coefficient n-octanol/water (Log Pow)	2.9 (at 25 °C)

(R)-p-mentha-1,8-diene; d-limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2)

Citronellyl acetate (mixed Isomers) (150-84-5)	
Partition coefficient n-octanol/water (Log Pow)	4.9 (at 25 °C (at pH 4.23)

Diphenyl oxide (101-84-8)	
BCF - Fish [1]	(470 dimensionless)
Partition coefficient n-octanol/water (Log Pow)	4.21 (at 25 °C)

isopentyl acetate (123-92-2)	
Partition coefficient n-octanol/water (Log Pow)	2.7 (at 35 °C)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
BCF - Fish [1]	230 – 2500
Partition coefficient n-octanol/water (Log Pow)	5.1

COUMARIN (91-64-5)	
Partition coefficient n-octanol/water (Log Pow)	≥ 1.91 – ≤ 1.51 (at 25 °C (at pH 7)

Triplal (Vertocitral) (68039-49-6)	
Partition coefficient n-octanol/water (Log Pow)	2.6

Veratryl aldehyde (Veratraldehyde) (120-14-9)	
Partition coefficient n-octanol/water (Log Pow)	0.8 (at 25 °C)

benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
Bioaccumulative potential	Not established.

butyric acid (107-92-6)	
Partition coefficient n-octanol/water (Log Pow)	1.1 (at 25 °C (at pH 3)

Alcohol C-10 (112-30-1)	
Partition coefficient n-octanol/water (Log Pow)	4.5 (at 25 °C (at pH 6)

Caproic acid (142-62-1)	
Partition coefficient n-octanol/water (Log Pow)	1.88

Amyl formate (638-49-3)	
Partition coefficient n-octanol/water (Log Pow)	2.786 (at 25 °C)

Aldehyde C-6 (66-25-1)	
Partition coefficient n-octanol/water (Log Pow)	2.3 (at 25 °C (at pH 5)

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

FRENCH PEAR FR30999	
Other information	Avoid release to the environment.

benzyl benzoate (120-51-4)	
Other information	Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container in accordance with local/national laws and regulations.

Ecological waste information : Avoid release to the environment.

HP Code : HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.
HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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. 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

EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
3(a)	Isobutyl acetate ; d-Limonene ; Isoamyl acetate ; Amyl formate ; Aldehyde C-6	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	FRENCH PEAR FR30999; Cinnamic aldehyde ; Eugenol ; Geranyl acetate ; Hexyl cinnamic aldehyde ; Isobutyl acetate ; Neryl acetate ; d-Limonene ; Citronellyl acetate (mixed Isomers) ; Triplal (Vertocitral) ; Benzyl benzoate ; Butyric acid ; Caproic acid ; Amyl formate	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	FRENCH PEAR FR30999; Verdox ; Cinnamic aldehyde ; Geranyl acetate ; Hexyl cinnamic aldehyde ; Aldehyde C-14 ; Ethylene brassylate ; d-Limonene ; Citronellyl acetate (mixed Isomers) ; Triplal (Vertocitral) ; Benzyl benzoate ; Alcohol C-10	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

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 (2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

VOC Directive (2004/42)

VOC content : 16.4373 % (calculated value)(CARB VOC) (%w/w)

Explosives Precursors Regulation (EU 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 (EC 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)

National regulations

Austria

Toxic Substances Ordinance 2000 : Is not subject to the Toxic Substances Ordinance 2000.

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

VOC ordinance (ChemVOCFarbV) : VOC content : 16.4373 % (calculated value)(CARB VOC) (%w/w)

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.
Major Accidents Ordinance (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-lijst van kankerverwekkende stoffen : Triplal (Vertocitral) is listed
SZW-lijst van mutagene stoffen : Triplal (Vertocitral) is 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

Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)

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. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains {0|message≤name of sensitising substance>|fieldvalue=_SENSITIZER_COMPONENTS}. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C

Full text of H- and EUH-statements:	
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU