

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 11/4/2020 Revision date: 2/27/2023 Supersedes version of: 6/27/2022 Version: 2.0

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

1.1. Product identifier

Product form : Mixture
Product name : Cherry Vanilla

UFI : 4T8V-T1JS-G00A-U9JN
Product code : parf_cherry_vanilla
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

BAKED GAMES SRL ROMANIA, BUCHAREST, SECTOR 4 +40771326626

contact@kitlumanari.ro | www.kitlumanari.ro

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 sensitisation, Category 1 H317
Hazardous to the aquatic environment – Acute Hazard, Category 1 H400
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

Harmful if swallowed. Toxic to aquatic life with long lasting effects. May cause an allergic skin reaction. Very toxic to aquatic life.

2.2. Label elements

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

Hazard pictograms (CLP)





GHS07

GHS09

Signal word (CLP) : Warning

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Contains : Benzyl benzoate, Heliotropine, Lemon oil , Hexyl cinnamic aldehyde, Hexyl salicylate, Allyl

cyclohexylpropionate, beta-Caryophyllene, Eugenol

Hazard statements (CLP) : H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction.

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : 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.

P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

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]
Benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-	29.6 – 59.2	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Hexamethylindanopyran	CAS-No.: 1222-05-5 EC-No.: 214-946-9 EC Index-No.: 603-212-00-7 REACH-no: 01-2119488227-	4.4 – 8.75	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzaldehyde substance with national workplace exposure limit(s) (BG, FI, HU, LT, LV, PL)	CAS-No.: 100-52-7 EC-No.: 202-860-4 EC Index-No.: 605-012-00-5 REACH-no: 01-2119455540-	1.9 – 3.75	Acute Tox. 4 (Oral), H302
Dimethylbenzyl carbinyl butyrate(DMBCB)	CAS-No.: 10094-34-5 EC-No.: 233-221-8 REACH-no: 01-2120742578- 44	1.8 – 3.5	Skin Irrit. 2, H315 Aquatic Chronic 2, H411
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040- 60	1.8 – 3.5	Eye Irrit. 2, H319
Ethyl maltol	CAS-No.: 4940-11-8 EC-No.: 225-582-5	1.3 – 2.6	Acute Tox. 4 (Oral), H302

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lemon oil	CAS-No.: 8008-56-8 EC-No.: 284-515-8;616-925-3	0.9 – 1.85	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Repr. 2, H361 Aquatic Chronic 2, H411
Aldehyde C-14	CAS-No.: 104-67-6 EC-No.: 203-225-4 REACH-no: 01-2119959333- 34	0.7 – 1.3	Aquatic Chronic 3, H412
Heliotropine	CAS-No.: 120-57-0 EC-No.: 204-409-7 REACH-no: 01-2119983608- 21	0.5 – 0.9	Skin Sens. 1B, H317
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272- 42	0.2 – 0.45	Aquatic Chronic 3, H412
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092- 50	0.2 – 0.45	Skin Sens. 1, H317 Aquatic Chronic 2, H411
Hexyl salicylate	CAS-No.: 6259-76-3 EC-No.: 228-408-6	0.101 – 0.2184	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Allyl cyclohexylpropionate	CAS-No.: 2705-87-5 EC-No.: 220-292-5	0.1 – 0.2	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
beta-Caryophyllene	CAS-No.: 87-44-5 EC-No.: 201-746-1 REACH-no: 01-2120745237- 53	0.055 – 0.2	Skin Sens. 1B, H317 Asp. Tox. 1, H304
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1 REACH-no: 01-2119971802- 33	0.025 – 0.125	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317
d-Limonene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-029-00- 7;601-096-00-2 REACH-no: 01-2119493353- 35	< 0.0025	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
.alphaPinene substance with national workplace exposure limit(s) (BE, EE, ES, LT, PT, SE, NO)	CAS-No.: 80-56-8 EC-No.: 201-291-9	< 0.0025	Flam. Liq. 3, H226
.betaPinene substance with national workplace exposure limit(s) (BE, EE, ES, LT, PT, SE, NO)	CAS-No.: 127-91-3 EC-No.: 204-872-5	< 0.0025	Flam. Liq. 3, H226

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

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 eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. 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.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

2/27/2023 (Revision date) EN (English) 4/21

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid

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

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. 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

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

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

Benzaldehyde (100-52-7)		
Bulgaria - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Finland - Occupational Exposure Limits		
HTP (OEL TWA) [1]	4.4 mg/m³	
HTP (OEL TWA) [2]	1 ppm	
HTP (OEL C)	17.4 mg/m³	
HTP (OEL C) [ppm]]	4 ppm	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	5 mg/m³	
CK (OEL STEL)	10 mg/m³	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	10 mg/m³	
NDSCh (OEL STEL)	40 mg/m³	
Benzyl acetate (140-11-4)		
Belgium - Occupational Exposure Limits		
OEL TWA	62 mg/m³	
OEL TWA [ppm]	10 ppm	

Safety Data Sheet

Denmark - Occupational Exposure Limits			
OEL TWA [1] 61 mg/m² OEL TWA [2] 10 ppm Irreland - Occupational Exposure Limits OEL TWA [2] OEL TWA [2] 10 ppm OEL STEL [ppm] 30 ppm (calculated) Latvia - Occupational Exposure Limits 5 mg/m² Lithuania - Occupational Exposure Limits 15 mg/m² Portugal - Occupational Exposure Limits 61 mg/m² OEL TWA [ppm] 10 ppm OEL TWA [ppm] 44 - Not Classiflable as a Human Carcinogen Romania - Occupational Exposure Limits 50 mg/m² OEL TWA [ppm] 8 ppm OEL TWA [ppm] 8 ppm OEL STEL [ppm] 13 ppm OEL STEL [ppm] 13 ppm OEL STEL [ppm] 62 mg/m² VLA-ED (OEL TWA) [1] 62 mg/m² VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH CLE TWA [pm] ACGIH CLE TWA [pm] 10 ppm ACGIH CLE TWA [2] 25 ppm HTP (OEL TWA) [2] 25 ppm HTP (OEL TWA) [2] 26 mg/m² HTP (OEL STEL) [ppm] 50 ppm <	Benzyl acetate (140-11-4)		
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OEL TWA [ppm] 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ OEL TWA [ppm] 8 ppm OEL STEL 80 mg/m³ OEL STEL [ppm] 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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) Siovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	IPRV (OEL TWA)	5 mg/m³	
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Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ OEL TWA 50 mg/m³ OEL STEL 80 mg/m³ OEL STEL 80 mg/m³ OEL STEL 90 mg/m³ Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) ppm 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³ Slovenia - Occupational Exposure Limits (CEL TWA) 10 mg/m³	OEL TWA [ppm]	10 ppm	
OEL TWA [ppm] 8 ppm OEL STEL 80 mg/m³ OEL STEL [ppm] 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA) [2] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL TWA) [2] 26 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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) Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³ Skin notation, Skin sensitization	OEL chemical category	A4 - Not Classifiable as a Human Carcinogen	
OEL TWA [ppm] 8 ppm OEL STEL 80 mg/m³ OEL STEL [ppm] 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	Romania - Occupational Exposure Limits		
OEL STEL [ppm] 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m² VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m² HTP (OEL TWA) [2] 25 ppm HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m² HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 mg/m² (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/m²	OEL TWA	50 mg/m³	
OEL STEL [ppm] 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits CEL TWA 28 mg/m³	OEL TWA [ppm]	8 ppm	
Spain - Occupational Exposure Limits VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	OEL STEL	80 mg/m³	
VLA-ED (OEL TWA) [1] 62 mg/m³ VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	OEL STEL [ppm]	13 ppm	
VLA-ED (OEL TWA) [2] 10 ppm USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	Spain - Occupational Exposure Limits		
USA - ACGIH - Occupational Exposure Limits ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) 280 mg/m³ Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	VLA-ED (OEL TWA) [1]	62 mg/m³	
ACGIH OEL TWA [ppm] 10 ppm ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] 140 mg/m³ HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	VLA-ED (OEL TWA) [2]	10 ppm	
ACGIH chemical category Not Classifiable as a Human Carcinogen d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1] HTP (OEL TWA) [2] 140 mg/m³ HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	USA - ACGIH - Occupational Exposure Limits		
d-Limonene (5989-27-5) Finland - Occupational Exposure Limits HTP (OEL TWA) [1]	ACGIH OEL TWA [ppm]	10 ppm	
Finland - Occupational Exposure Limits HTP (OEL TWA) [1]	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
HTP (OEL TWA) [1] HTP (OEL TWA) [2] 25 ppm HTP (OEL STEL) 280 mg/m³ 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	d-Limonene (5989-27-5)		
HTP (OEL TWA) [2] HTP (OEL STEL) 280 mg/m³ 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	Finland - Occupational Exposure Limits		
HTP (OEL STEL) 280 mg/m³ HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	HTP (OEL TWA) [1]	140 mg/m³	
HTP (OEL STEL) [ppm] 50 ppm Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	HTP (OEL TWA) [2]	25 ppm	
Germany - Occupational Exposure Limits (TRGS 900) AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	HTP (OEL STEL)	280 mg/m³	
AGW (OEL TWA) [1] 28 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, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	HTP (OEL STEL) [ppm]	50 ppm	
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	Germany - Occupational Exposure Limits (TRGS 90		
values are observed) Chemical category Skin notation, Skin sensitization Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	AGW (OEL TWA) [1]		
Slovenia - Occupational Exposure Limits OEL TWA 28 mg/m³	AGW (OEL TWA) [2]		
OEL TWA 28 mg/m³	Chemical category	Skin notation, Skin sensitization	
	Slovenia - Occupational Exposure Limits		
OEL TWA [ppm] 5 ppm	OEL TWA	28 mg/m³	
	OEL TWA [ppm]	5 ppm	

Safety Data Sheet

d-Limonene (5989-27-5)			
OEL STEL	112 mg/m³		
OEL STEL [ppm]	20 ppm		
OEL chemical category	Potential for cutaneous absorption		
Spain - Occupational Exposure Limits	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		
Norway - Occupational Exposure Limits			
Grenseverdi (OEL TWA) [1]	140 mg/m³		
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/m³		
MAK (OEL TWA) [2]	7 ppm		
KZGW (OEL STEL)	80 mg/m³		
KZGW (OEL STEL) [ppm]	14 ppm		
OEL chemical category	Sensitizer		
.alphaPinene (80-56-8)			
Belgium - Occupational Exposure Limits			
	20 ppm		
Belgium - Occupational Exposure Limits	20 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm]	20 ppm 150 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits			
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA	150 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm]	150 mg/m³ 25 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL	150 mg/m³ 25 ppm 300 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm]	150 mg/m³ 25 ppm 300 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA)	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm]	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL)	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL) TPRV (OEL STEL) [ppm]	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL) TPRV (OEL STEL) TPRV (OEL STEL) [ppm] Portugal - Occupational Exposure Limits	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³ 50 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL) TPRV (OEL STEL) [ppm] Portugal - Occupational Exposure Limits OEL TWA [ppm]	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³ 25 ppm 300 mg/m³ 50 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL) TPRV (OEL STEL) [ppm] Portugal - Occupational Exposure Limits OEL TWA [ppm] OEL chemical category	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³ 25 ppm 300 mg/m³ 50 ppm		
Belgium - Occupational Exposure Limits OEL TWA [ppm] Estonia - Occupational Exposure Limits OEL TWA OEL TWA [ppm] OEL STEL OEL STEL [ppm] Lithuania - Occupational Exposure Limits IPRV (OEL TWA) IPRV (OEL TWA) [ppm] TPRV (OEL STEL) TPRV (OEL STEL) TPRV (OEL STEL) [ppm] Portugal - Occupational Exposure Limits OEL TWA [ppm] OEL chemical category Spain - Occupational Exposure Limits	150 mg/m³ 25 ppm 300 mg/m³ 50 ppm 150 mg/m³ 25 ppm 300 mg/m³ 25 ppm 300 mg/m³ 50 ppm 20 ppm (Turpentine and selected Monoterpenes) Sensitizer, A4 - Not Classifiable as a Human Carcinogen		

Safety Data Sheet

.alphaPinene (80-56-8)	
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	150 mg/m³
NGV (OEL TWA) [ppm]	25 ppm
KTV (OEL STEL)	300 mg/m³
KTV (OEL STEL) [ppm]	50 ppm
OEL chemical category	Sensitizer
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	140 mg/m³
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	Skin notation
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	20 ppm (Turpentine and selected monoterpenes)
ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer
.betaPinene (127-91-3)	
Belgium - Occupational Exposure Limits	
OEL TWA [ppm]	20 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	150 mg/m³
OEL TWA [ppm]	25 ppm
OEL STEL	300 mg/m³
OEL STEL [ppm]	50 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	150 mg/m³
IPRV (OEL TWA) [ppm]	25 ppm
TPRV (OEL STEL)	300 mg/m³
TPRV (OEL STEL) [ppm]	50 ppm
Portugal - Occupational Exposure Limits	
OEL TWA [ppm]	20 ppm (Turpentine and selected Monoterpenes)
OEL chemical category	Sensitizer, A4 - Not Classifiable as a Human Carcinogen
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	113 mg/m³
VLA-ED (OEL TWA) [2]	20 ppm
OEL chemical category	Sensitizer
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	150 mg/m³
NGV (OEL TWA) [ppm]	25 ppm
KTV (OEL STEL)	300 mg/m³

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

.betaPinene (127-91-3)		
KTV (OEL STEL) [ppm]	50 ppm	
OEL chemical category	Sensitizer	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	140 mg/m³	
Grenseverdi (OEL TWA) [2]	25 ppm	
Korttidsverdi (OEL STEL)	175 mg/m³ (value calculated)	
Korttidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA [ppm]	20 ppm (Turpentine and selected monoterpenes)	
ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer	

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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. : Not available Odour threshold : Not applicable Melting point 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 : > 93.33 °C (closed cup) ASTM D7094

Auto-ignition temperature : Not available Not available Decomposition temperature рΗ : 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 :≈0.98 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

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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation) :	Not classified
Cherry Vanilla	
ATE CLP (oral)	809.301 mg/kg bodyweight
Benzyl benzoate (120-51-4)	
LD50 oral rat	500 mg/kg
LD50 oral	1500 mg/kg bodyweight
LD50 dermal rabbit	4000 mg/kg
LD50 dermal	4000 mg/kg bodyweight
Hexamethylindanopyran (1222-05-5)	
LD50 oral rat	> 3250 mg/kg
LD50 dermal rabbit	> 3250 mg/kg
Dimethylbenzyl carbinyl butyrate(DMBCB) (10	0094-34-5)
LD50 oral rat	> 5 g/kg
Benzaldehyde (100-52-7)	
LD50 oral rat	1292 mg/kg
LD50 dermal rabbit	> 1250 mg/kg
Vanillin (121-33-5)	
LD50 dermal rabbit	> 5010 mg/kg
LD50 dermal	2600 mg/kg bodyweight
Aldehyde C-14 (104-67-6)	
LD50 oral rat	18500 mg/kg
LD50 dermal rat	> 2000 mg/kg
Heliotropine (120-57-0)	
LD50 oral rat	2700 mg/kg
LD50 oral	2700 mg/kg bodyweight
LD50 dermal rat	> 5000 mg/kg
Benzyl acetate (140-11-4)	
LD50 oral rat	2490 mg/kg
LD50 oral	2490 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg
Ethyl maltol (4940-11-8)	
LD50 oral rat	1150 mg/kg

Safety Data Sheet

1200 mg/kg bodyweight
> 5000 mg/kg
2840 mg/kg
3100 mg/kg
3100 mg/kg bodyweight
> 3000 mg/kg
> 5 mg/l/4h
> 5 g/kg
> 5000 mg/kg
585 mg/kg
480 mg/kg bodyweight
1600 mg/kg
1600 mg/kg bodyweight
11 mg/l/4h
1930 mg/kg
2500 mg/kg bodyweight
4400 mg/kg
> 5 g/kg
3700 mg/kg
500 mg/kg bodyweight
> 5000 mg/kg
> 5000 mg/kg
> 5000 mg/kg
Not classified Not classified
May cause an allergic skin reaction.
Not classified
Not classified
3 - Not classifiable

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Eugenol (97-53-0)		
IARC group	3 - Not classifiable	
d-Limonene (5989-27-5)		
IARC group	3 - Not classifiable	
Reproductive toxicity :	Not classified	
STOT-single exposure :	Not classified	
STOT-repeated exposure :	Not classified	
Aspiration hazard :	Not classified	
Benzyl benzoate (120-51-4)		
Viscosity, kinematic	7.456 mm ² /s	
Heliotropine (120-57-0)		
Viscosity, kinematic	Not applicable	

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

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

Hazardous to the aquatic environment, short-term : Very toxic to aquatic life.

(acute)

: Toxic to aquatic life with long lasting effects. Hazardous to the aquatic environment, long-term

(chronic)

(CHOHIC)	
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
Hexamethylindanopyran (1222-05-5)	
LC50 - Fish [1]	0.452 mg/l Wolf, 1996d-27682
LC50 - Other aquatic organisms [1]	> 0.14 mg/l REACH DOSSIER Pimephales promelas
EC50 - Crustacea [2]	260 μg/l REACH Dossier
EC50 - Other aquatic organisms [1]	0.131 mg/l REACH Dossier
Benzaldehyde (100-52-7)	
LC50 - Fish [1]	10.6 – 11.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
LC50 - Fish [2]	12.69 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
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])
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

Safety Data Sheet

LC50 - Fish [1] 2.5 mg/l (Exposure time: 96 h - Spe Ethyl maltol (4940-11-8) LC50 - Fish [1] > 85 mg/l (Exposure time: 96 h - Spe	
LC50 - Fish [1] > 85 mg/l (Exposure time: 96 h - Sp	
	pecies: Oncorhynchus mykiss)
Allyl cyclohexylpropionate (2705-87-5)	
LC50 - Fish [1] 0.13 mg/l (Exposure time: 96 h - Sp	pecies: Pimephales promelas [flow-through])
Eugenol (97-53-0)	
LC50 - Fish [1] 13 mg/l (Exposure time: 96 h - Spec	cies: Danio rerio [semi-static])
d-Limonene (5989-27-5)	
LC50 - Fish [1] 0.619 – 0.796 mg/l (Exposure time:	96 h - Species: Pimephales promelas [flow-through])
LC50 - Fish [2] 35 mg/l (Exposure time: 96 h - Spec	cies: Oncorhynchus mykiss)
.alphaPinene (80-56-8)	
LC50 - Fish [1] 0.28 mg/l (Exposure time: 96 h - Sp	pecies: Pimephales promelas [static])
EC50 - Crustacea [1] 41 mg/l (Exposure time: 48 h - Spec	cies: Daphnia magna)
12.2. Persistence and degradability	
Benzyl benzoate (120-51-4)	
Persistence and degradability May cause long-term adverse effect	ts in the environment.
12.3. Bioaccumulative potential	
Benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow) 3.97 (at 25 °C)	
Bioaccumulative potential Not established.	
Hexamethylindanopyran (1222-05-5)	
BCF - Fish [1] (1618 dimensionless (whole body w	v.w.)
Partition coefficient n-octanol/water (Log Pow) 5.3 (at 25 °C (at pH 7)	
Dimethylbenzyl carbinyl butyrate(DMBCB) (10094-34-5)	
Partition coefficient n-octanol/water (Log Pow) 4.7 (at 25 °C)	
Benzaldehyde (100-52-7)	
BCF - Fish [1] (no significant bioaccumulation)	
Partition coefficient n-octanol/water (Log Pow) 1.4 (at 25 °C)	
Vanillin (121-33-5)	
Partition coefficient n-octanol/water (Log Pow) 1.23 (at 22 °C)	
Aldehyde C-14 (104-67-6)	
Partition coefficient n-octanol/water (Log Pow) 3.6 (at 25 °C)	
Heliotropine (120-57-0)	
Partition coefficient n-octanol/water (Log Pow) 1.2 (at 35 °C)	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Benzyl acetate (140-11-4)			
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)		
Ethyl maltol (4940-11-8)			
Partition coefficient n-octanol/water (Log Pow)	2.9 (at 25 °C)		
Hexyl salicylate (6259-76-3)			
Partition coefficient n-octanol/water (Log Pow)	5.5 (at 30 °C (at pH 7)		
Allyl cyclohexylpropionate (2705-87-5)			
Partition coefficient n-octanol/water (Log Pow)	4.28 (at 20 °C (at pH 5.3)		
beta-Caryophyllene (87-44-5)			
Partition coefficient n-octanol/water (Log Pow)	6.23 (at 25 °C (at pH 7)		
Eugenol (97-53-0)			
Partition coefficient n-octanol/water (Log Pow)	1.83 (at 30 °C (at pH 5.5)		
d-Limonene (5989-27-5)			
Partition coefficient n-octanol/water (Log Pow) 4.38 (at 37 °C (at pH 7.2)			
.alphaPinene (80-56-8)	.alphaPinene (80-56-8)		
Partition coefficient n-octanol/water (Log Pow)	4.1		

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

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.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;
 - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;
 - 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.

HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.

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 n	14.1. UN number or ID number				
UN 3082	UN 3082 UN 3082		UN 3082	UN 3082	
14.2. UN proper shippin	g name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HEXAMETHYLINDANOPY RAN)	HAZARDOUS substance, liquid, n.o.s.		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
Transport document descr	iption				
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HEXAMETHYLINDANOPY RAN), 9, III, (-)	N.O.S. RAN), 9, III N.O.S., 9, III		ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, III	
14.3. Transport hazard	class(es)				
9	9	9	9	9	
14.4. Packing group					
III	III	III	III	III	
14.5. Environmental hazards					
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Yes environment: Yes environment: Yes environment		Dangerous for the environment: Yes	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M6

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5I

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : 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 :

90 3082

Tunnel restriction code (ADR) : EAC code : •3Z

Transport by sea

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

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
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) : M6

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Rail transport

Classification code (RID) : M6

Special provisions (RID) : 274, 335, 375, 601

Excepted quantities (RID) : E1

Packing instructions (RID) : P001, IBC03, LP01, R001

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : 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)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	Lemon oil	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)	Cherry Vanilla; Benzyl benzoate; Dimethylbenzyl carbinyl butyrate(DMBCB); Benzaldehyde; Lemon oil; Hexyl cinnamic aldehyde; Hexyl salicylate; Allyl cyclohexylpropionate; Eugenol	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)	Cherry Vanilla; Benzyl benzoate; Hexamethylindanopyran; Dimethylbenzyl carbinyl butyrate(DMBCB); Aldehyde C-14; Lemon oil; Hexyl cinnamic aldehyde; Hexyl salicylate; Allyl cyclohexylpropionate	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

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
40.	Lemon oil	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

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 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)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Piperonal		120-57-0	2932 93 00	Category 1		Annex I

15.1.2. National regulations

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

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.

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(1) - highly toxic for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen : Lemon oil is listed SZW-lijst van mutagene stoffen : Lemon oil is listed

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

Vruchtbaarheid

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

2/27/2023 (Revision date) EN (English) 19/21

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Denmark

Classification remarks : 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	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
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. 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 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	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H312	Harmful in contact with skin.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H361	Suspected of damaging fertility or the unborn child.	
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.	
Repr. 2	Reproductive toxicity, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
Skin Sens. 1B	Skin sensitisation, category 1B	

The classification complies with

: ATP 12

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.