Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Issue date: 11/27/2024 Version: 1.0



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

1.1. Product identifier

Product form : Mixture

Product name : ALMOND CC-13220 5% in DPG

Product code : CC-13220_5% Type of product : Perfumes, fragrances

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial

For professional use only

Use of the substance/mixture : Perfumes, fragrances Function or use category : Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Candle Craft Weiherwiese 10 65510 Idstein - Germany T 49-6126-9363 -0

info@candlecraft.de - www.candlecraft.de

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment - Chronic Hazard, H412

Category 3

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Signal word (CLP)

: H412 - Harmful to aquatic life with long lasting effects. Hazard statements (CLP)

Precautionary statements (CLP) : P273 - Avoid release to the environment.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

EUH-statements : EUH208 - Contains Benzyl salicylate, COUMARIN. May produce an allergic reaction.

Extra phrases : For professional users only.

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 %

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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- 33	1.405 – 2.8125	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
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-	0.395 – 0.7875	Acute Tox. 4 (Oral), H302
Benzyl salicylate	CAS-No.: 118-58-1 EC-No.: 204-262-9 EC Index-No.: 607-754-00-5 REACH-no: 01-2119969442- 31	0.09 – 0.1775	Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756- 26	0.08 – 0.1575	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
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	0.05 – 0.1	Flam. Liq. 3, H226
acetophenone substance with national workplace exposure limit(s) (BE, BG, DK, ES, FI, HU, IE, LT, LV, PL, PT, RO)	CAS-No.: 98-86-2 EC-No.: 202-708-7 EC Index-No.: 606-042-00-1 REACH-no: 01-2119533169- 37	0.035 - 0.07	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319
benzyl alcohol substance with national workplace exposure limit(s) (BG, CZ, DE, FI, LT, LV, PL, SI, CH)	CAS-No.: 100-51-6 EC-No.: 202-859-9 EC Index-No.: 603-057-00-5 REACH-no: 01-2119492630- 38	0.035 – 0.07	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, 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	0.015 – 0.03	Aquatic Chronic 3, H412
Dipropylene glycol monomethyl ether 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.: 34590-94-8 EC-No.: 252-104-2	0.0000127 – 0.0000254	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Toluene 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.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3	≤ 0.0000003	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

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 : 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.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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.

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

No additional information available

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

No additional information available

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

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6.2. Environmental precautions

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

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
 Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: 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.

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

container closed when not in use.Strong bases. Strong acids.

Incompatible products Incompatible materials

: Sources of ignition. Direct sunlight.

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

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) 4.4 mg/m³	

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benzaldehyde (100-52-7)		
	1 ppm	
HTP (OEL C)	17.4 mg/m³	
	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	
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)	070 (2	
OTT (OLL 11111)	270 mg/m³	
O.1. (OLL 1.11.)	50 ppm	
KGVI (OEL STEL)	-	

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isopentyl acetate (123-92-2)		
Cyprus - Occupational Exposure Limits		
OEL TWA	270 mg/m³	
	50 ppm	
OEL STEL	540 mg/m³	
	100 ppm	
Denmark - Occupational Exposure Limit	s	
OEL TWA	271 mg/m³ (Amyl acetate, all isomers)	
	50 ppm (Amyl acetate, all isomers)	
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 Limit	s (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	

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isopentyl acetate (123-92-2)		
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	
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)	

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OEL STEL 50 ppm (indicative limit value) (Pentyl acetate, all isomers) OEL STEL 540 mg/m² (indicative limit value) Romania - Occupational Exposure Limits 270 mg/m² (indicative limit value) OEL TWA 270 mg/m² (indicative limit value) OEL STEL 50 ppm OEL STEL 50 ppm Slovakia - Occupational Exposure Limits 700 mg/m² (indicative limit value) Slovakia - Occupational Exposure Limits 270 mg/m² (indicative limit value) Slovania - Occupational Exposure Limits 270 mg/m² (indicative limit value) Slovania - Occupational Exposure Limits 270 mg/m² (indicative limit value) Spain - Occupational Exposure Limits 270 mg/m² (indicative limit value) VLA-EC (OEL STEL) 50 ppm (indicative limit value) VLA-EC (OEL STEL) 50 ppm (indicative limit value) VLA-EC (OEL STEL) 50 ppm (indicative limit value) Sweden - Occupational Exposure Limits 270 mg/m² (indicative limit value) VLA-EC (OEL STEL) 50 ppm (indicative limit value) Sweden - Occupational Exposure Limits 270 mg/m² (indicative limit value) Key (OEL TWA) 50 ppm (indicative limit value) Norway - Occupational Exposure Limits <th colspan="2">isopentyl acetate (123-92-2)</th>	isopentyl acetate (123-92-2)		
		50 ppm (indicative limit value (Pentyl acetate, all isomers)	
Romania - Occupational Exposure Limits 270 mg/m³ OEL TWA 50 ppm OEL STEL 540 mg/m³ 500 ppm 500 ppm Slovakia - Occupational Exposure Limits NPHY (OEL TWA) 270 mg/m³ 50 ppm 500 ppm Slovania - Occupational Exposure Limits OEL TWA 270 mg/m³ 50 ppm 500 ppm Spain - Occupational Exposure Limits YLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) Spain - Occupational Exposure Limits YLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) YLA-ED (OEL TWA) 400 mg/m³ (indicative limit value) Sweden - Occupational Exposure Limits Novelen - Occupational Exposure Limits Novelen - Occupational Exposure Limits Novelen - Occupational Exposure Limits Op pm (Pentyl acetates) (In op pm (Pentyl acetates)	OEL STEL	540 mg/m³ (indicative limit value)	
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100 ppm 100		50 ppm	
Stockia - Occupational Exposure Limits	OEL STEL	540 mg/m³	
NPHV (OEL TWA) 270 mg/m³ 50 ppm 50 ppm NPHV (OEL C) 540 mg/m³ Stovenia - Occupational Exposure Limits 270 mg/m³ OEL TWA 270 mg/m³ 60 ppm 50 ppm OEL STEL 400 mg/m³ 100 ppm 5pm Spain - Occupational Exposure Limits 270 mg/m³ (indicative limit value) VLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) VLA-EC (OEL STEL) 540 mg/m³ 5weden - Occupational Exposure Limits 50 ppm (indicative limit value) Sweden - Occupational Exposure Limits 50 ppm (Pentyl acetates) KGY (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) Norway - Occupational Exposure Limits 50 ppm (Pentyl acetates) Kortidsverdi (OEL STEL) 280 mg/m³ (value calculated) 7 ppm (value calculated) 7 ppm (value calculated) Switzerland - Occupational Exposure Limits 60 ppm (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) <td></td> <td>100 ppm</td>		100 ppm	
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Silovenia - 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-ED (OEL STEL) 540 mg/m³ 100 ppm Sweden - Occupational Exposure Limits NGV (OEL STEL) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) 50 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) Norway - Occupational Exposure Limits Silovenia - Occupational Exposure Limits Forenseverdi (OEL TWA) 260 mg/m³ (Pentyl acetated) 75 ppm (Value calculated) 75 ppm (Value calculated) 75 ppm (Value calculated) Switzeriand - 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) 50 ppm (Pentyl acetate all isomers)		50 ppm	
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So ppm	Slovenia - Occupational Exposure Limits	•	
OEL STEL 540 mg/m³ / 100 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) VLA-EC (OEL STEL) 540 mg/m³ / 100 ppm Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) Norway - Occupational Exposure Limits 100 ppm (Pentyl acetates) Norway - Occupational Exposure Limits 260 mg/m³ (value calculated) Kortidosverdi (OEL STEL) 325 mg/m³ (value calculated) Switzerland - Occupational Exposure Limits 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits	OEL TWA	270 mg/m³	
Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) 50 ppm (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 (Pentyl acetates) 50 ppm (Pentyl acetates) 50 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) Norway - Occupational Exposure Limits Fernseverdi (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)		50 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 (Pentyl acetates) 50 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) Norway - Occupational Exposure Limits RGY (OEL STEL) 260 mg/m³ 50 ppm Korttidsverdi (OEL STEL) 250 mg/m³ (value calculated) 75 ppm (value calculated) Switzerland - Occupational Exposure Limits MAK (OEL TWA) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)	OEL STEL	540 mg/m³	
VLA-ED (OEL TWA) 270 mg/m³ (indicative limit value) VLA-EC (OEL STEL) 540 mg/m³ VLA-EC (OEL STEL) 540 mg/m³ Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) Norway - Occupational Exposure Limits 260 mg/m³ Grenseverdi (OEL TWA) 260 mg/m³ Korttidsverdi (OEL STEL) 325 mg/m³ (value calculated) 75 ppm (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) 50 ppm (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)		100 ppm	
VLA-EC (OEL STEL) 50 ppm (indicative limit value) VLA-EC (OEL STEL) 540 mg/m³ 100 ppm Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 100 ppm (Pentyl acetates) 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) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)	Spain - Occupational Exposure Limits		
VLA-EC (OEL STEL) 540 mg/m³ 100 ppm Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 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) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers)	VLA-ED (OEL TWA)	270 mg/m³ (indicative limit value)	
Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 100 ppm (Pentyl acetates) 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) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)		50 ppm (indicative limit value)	
Sweden - Occupational Exposure Limits NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 100 ppm (Pentyl acetates) 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) KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)	VLA-EC (OEL STEL)	540 mg/m³	
NGV (OEL TWA) 270 mg/m³ (Pentyl acetates) 50 ppm (Pentyl acetates) KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 100 ppm (Pentyl acetates) 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		100 ppm	
KGV (OEL STEL) 50 ppm (Pentyl acetates) 540 mg/m³ (Pentyl acetates) 100 ppm (Pentyl acetates) 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	Sweden - Occupational Exposure Limits		
KGV (OEL STEL) 540 mg/m³ (Pentyl acetates) 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) VEA - ACGIH - Occupational Exposure Limits	NGV (OEL TWA)	270 mg/m³ (Pentyl acetates)	
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		50 ppm (Pentyl acetates)	
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	KGV (OEL STEL)	540 mg/m³ (Pentyl acetates)	
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) USA - ACGIH - Occupational Exposure Limits		100 ppm (Pentyl acetates)	
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	Norway - Occupational Exposure Limits		
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	Grenseverdi (OEL TWA)	260 mg/m³	
T5 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		50 ppm	
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) 50 ppm (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits	Korttidsverdi (OEL STEL)	325 mg/m³ (value calculated)	
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) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits		75 ppm (value calculated)	
KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits	Switzerland - Occupational Exposure Limits		
KZGW (OEL STEL) 260 mg/m³ (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits	MAK (OEL TWA)	260 mg/m³ (Pentyl acetate all isomers)	
50 ppm (Pentyl acetate all isomers) USA - ACGIH - Occupational Exposure Limits		50 ppm (Pentyl acetate all isomers)	
USA - ACGIH - Occupational Exposure Limits	KZGW (OEL STEL)	260 mg/m³ (Pentyl acetate all isomers)	
		50 ppm (Pentyl acetate all isomers)	
ACGIH OEL TWA 50 ppm (Pentyl acetate, all isomers)	USA - ACGIH - Occupational Exposure Limits	•	
	ACGIH OEL TWA	50 ppm (Pentyl acetate, all isomers)	

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isopentyl acetate (123-92-2)		
ACGIH OEL STEL	100 ppm (Pentyl acetate, all isomers)	
acetophenone (98-86-2)		
Belgium - Occupational Exposure Limits		
OEL TWA	50 mg/m³	
	10 ppm	
Bulgaria - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Denmark - Occupational Exposure Limits		
OEL TWA	49 mg/m³	
	10 ppm	
OEL STEL	98 mg/m³	
	20 ppm	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	25 mg/m³	
	5 ppm	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	50 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA	49 mg/m³	
	10 ppm	
OEL STEL	147 mg/m³ (calculated)	
	30 ppm (calculated)	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
OEL chemical category	Skin notation	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	50 mg/m³	
NDSCh (OEL STEL)	100 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	10 ppm	
Romania - Occupational Exposure Limits		
OEL TWA	100 mg/m³	
	20 ppm	
OEL STEL	200 mg/m³	
	41 ppm	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	50 mg/m³	

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acetophenone (98-86-2)		
	10 ppm	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	10 ppm	
benzyl alcohol (100-51-6)		
Bulgaria - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	40 mg/m³	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	45 mg/m³	
	10 ppm	
Germany - Occupational Exposure Limits (TRGS 90	00)	
AGW (OEL TWA)	22 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	
Latvia - Occupational Exposure Limits		
OEL TWA	5 mg/m³	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	5 mg/m³	
OEL chemical category	Skin notation	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	240 mg/m³	
Slovenia - Occupational Exposure Limits		
OEL TWA	22 mg/m³	
	5 ppm	
OEL STEL	44 mg/m³	
	10 ppm	
OEL chemical category	Potential for cutaneous absorption	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	22 mg/m³ (aerosol, vapour)	
	5 ppm (aerosol, vapour)	
OEL chemical category	Skin notation	
Benzyl acetate (140-11-4)		
Belgium - Occupational Exposure Limits		
OEL TWA	62 mg/m³	
	10 ppm	

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Denmark - Occupational Exposure Limits OEL TWA 61 mg/m³ 10 ppm OEL STEL 122 mg/m³ 20 ppm Ireland - Occupational Exposure Limits OEL TWA 10 ppm OEL STEL 30 ppm (calculated) Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 5 mg/m³ 8 ppm OEL STEL 80 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH OEL TWA 10 ppm	Benzyl acetate (140-11-4)		
Teland - Occupational Exposure Limits OEL TWA OEL STEL 10 ppm 10 ppm OEL STEL 10 ppm OEL STEL 30 ppm (calculated) Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL Chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	Denmark - Occupational Exposure Limits		
122 mg/m³ 20 ppm	OEL TWA	61 mg/m³	
Ireland - Occupational Exposure Limits OEL TWA 10 ppm OEL STEL 30 ppm (calculated) Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits		10 ppm	
Ireland - Occupational Exposure Limits	OEL STEL	122 mg/m³	
OEL TWA 10 ppm OEL STEL 30 ppm (calculated) Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits		20 ppm	
OEL STEL Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	Ireland - Occupational Exposure Limits		
Latvia - Occupational Exposure Limits OEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL TWA	10 ppm	
DEL TWA 5 mg/m³ Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL STEL	30 ppm (calculated)	
Lithuania - Occupational Exposure Limits IPRV (OEL TWA) 5 mg/m³ Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	Latvia - Occupational Exposure Limits		
IPRV (OEL TWA) Portugal - Occupational Exposure Limits OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL TWA	5 mg/m³	
Portugal - Occupational Exposure Limits OEL TWA OEL chemical category Romania - Occupational Exposure Limits OEL TWA OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	Lithuania - Occupational Exposure Limits		
OEL TWA 10 ppm OEL chemical category A4 - Not Classifiable as a Human Carcinogen Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	IPRV (OEL TWA)	5 mg/m³	
OEL chemical category Romania - Occupational Exposure Limits OEL TWA 50 mg/m³ 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	Portugal - Occupational Exposure Limits		
Spain - Occupational Exposure Limits 50 mg/m³ 8 ppm	OEL TWA	10 ppm	
OEL TWA 50 mg/m³ 8 ppm 8 ppm OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL chemical category	A4 - Not Classifiable as a Human Carcinogen	
8 ppm	Romania - Occupational Exposure Limits		
OEL STEL 80 mg/m³ 13 ppm Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL TWA	50 mg/m³	
Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits		8 ppm	
Spain - Occupational Exposure Limits VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits	OEL STEL	80 mg/m³	
VLA-ED (OEL TWA) 62 mg/m³ 10 ppm USA - ACGIH - Occupational Exposure Limits		13 ppm	
USA - ACGIH - Occupational Exposure Limits	Spain - Occupational Exposure Limits		
USA - ACGIH - Occupational Exposure Limits	VLA-ED (OEL TWA)	62 mg/m³	
		10 ppm	
ACGIH OEL TWA 10 ppm	USA - ACGIH - Occupational Exposure Limits		
	ACGIH OEL TWA	10 ppm	
ACGIH chemical category Not Classifiable as a Human Carcinogen	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
Toluene (108-88-3)	Toluene (108-88-3)		
EU - Indicative Occupational Exposure Limit (IOEL)	EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA 192 mg/m³	IOEL TWA	192 mg/m³	
50 ppm		50 ppm	
IOEL STEL 384 mg/m³	IOEL STEL	384 mg/m³	
100 ppm		100 ppm	
Remark Possibility of significant uptake through the skin	Remark	Possibility of significant uptake through the skin	
Austria - Occupational Exposure Limits			
MAK (OEL TWA) 190 mg/m³	MAK (OEL TWA)	190 mg/m³	
50 ppm		50 ppm	
MAK (OEL STEL) 380 mg/m³	MAK (OEL STEL)	380 mg/m³	
100 ppm		100 ppm	
OEL chemical category Skin notation	OEL chemical category	Skin notation	

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Toluene (108-88-3)		
Belgium - Occupational Exposure Limits		
OEL TWA	77 mg/m³	
	20 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Skin, Skin notation	
Bulgaria - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
Bulgaria - Biological limit values		
BLV	1.6 mmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of exposure or end of work shift	
Croatia - Occupational Exposure Limits		
GVI (OEL TWA)	192 mg/m³	
	50 ppm	
KGVI (OEL STEL)	384 mg/m³	
	100 ppm	
OEL chemical category	Skin notation	
Croatia - Biological limit values		
BLV	1 mg/l Parameter: Toluene - Medium: blood - Sampling time: at the end of the work shift 20 ppm Parameter: Toluene - Medium: final exhaled air - Sampling time: during exposure 2.5 g/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine) 1 mg/g creatinine Parameter: o-Cresol - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine)	
Cyprus - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Skin-potential for cutaneous absorption	
Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	200 mg/m³	
OEL chemical category	Potential for cutaneous absorption	

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Toluene (108-88-3)			
Czech Republic - Biological limit values			
BLV	1.6 µmol/mmol Creatinine Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1000 µmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.) 1.5 mg/g creatinine Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1600 mg/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.)		
Denmark - Occupational Exposure Limits			
OEL TWA	94 mg/m³		
	25 ppm		
OEL STEL	384 mg/m³		
	100 ppm		
OEL chemical category	Potential for cutaneous absorption		
Estonia - Occupational Exposure Limits			
OEL TWA	192 mg/m³		
	50 ppm		
OEL STEL	384 mg/m³		
	100 ppm		
OEL chemical category	Skin notation		
Finland - Occupational Exposure Limits			
HTP (OEL TWA)	81 mg/m ³		
	25 ppm		
HTP (OEL STEL)	380 mg/m³		
	100 ppm		
OEL chemical category	Potential for cutaneous absorption		
Finland - Biological limit values	Finland - Biological limit values		
BLV	500 nmol/L Parameter: Toluene - Medium: blood - Sampling time: in the morning after a working day		
France - Occupational Exposure Limits			
VME (OEL TWA)	76.8 mg/m³ (restrictive limit)		
	20 ppm (restrictive limit)		
VLE (OEL C/STEL)	384 mg/m³ (restrictive limit)		
	100 ppm (restrictive limit)		
OEL chemical category	Reproductive Toxin category 2, Risk of cutaneous absorption		

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Toluene (108-88-3)		
France - Biological limit values		
BLV	20 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of workweek (Semi- quantitative (ambiguous interpretation)) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (per the Authority, the values for this substance must be decided and/or determined on a case by case basis. Guidance for the calculation of and interpretation of values is provided in the source)	
Germany - Occupational Exposure Limits (TRGS 90	00)	
AGW (OEL TWA)	190 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
	50 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)	
Chemical category	Skin notation	
Germany - Biological limit values (TRGS 903)		
Biological limit value	600 μg/l Parameter: Toluene - Medium: whole blood - Sampling time: immediately after exposure 75 μg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 1.5 mg/l Parameter: o-Cresol (after hydrolysis) - Medium: urine - Sampling time: for long-term exposures: at the end of the shift after several shifts 1.5 mg/l Parameter: o-Cresol (after hydrolysis) - Medium: urine - Sampling time: end of shift	
Gibraltar - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
OF OTE	50 ppm	
OEL STEL	384 mg/m³	
OFL sharried estates.	100 ppm	
OEL chemical category Greece - Occupational Exposure Limits	Skin notation	
OEL TWA	192 mg/m³	
OEL TWA	1	
OEL STEL	50 ppm 384 mg/m³	
OLL SILL	100 ppm	
OEL chemical category	skin - potential for cutaneous absorption	
Hungary - Occupational Exposure Limits	Dian potential for outdiffeeds absorption	
AK (OEL TWA)	190 mg/m³	
CK (OEL STEL)	384 mg/m³	
OEL chemical category	Potential for cutaneous absorption	
Ireland - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Potential for cutaneous absorption	

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Toluene (108-88-3)		
Italy - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL chemical category	skin - potential for cutaneous absorption	
Latvia - Occupational Exposure Limits		
OEL TWA	50 mg/m³	
	14 ppm	
OEL chemical category	skin - potential for cutaneous exposure	
Latvia - Biological Exposure Indices	<u>'</u>	
BEI	1.6 g/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift 0.05 mg/l Parameter: Toluene - Medium: blood - Sampling time: end of shift	
Lithuania - Occupational Exposure Limits	·	
IPRV (OEL TWA)	192 mg/m³	
	50 ppm	
TPRV (OEL STEL)	384 mg/m³	
	100 ppm	
OEL chemical category	Reproductive toxin, Skin notation	
Luxembourg - Occupational Exposure Limits	·	
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Possibility of significant uptake through the skin	
Malta - Occupational Exposure Limits	·	
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Possibility of significant uptake through the skin	
Netherlands - Occupational Exposure Limits	·	
TGG-8u (OEL TWA)	150 mg/m³	
	39 ppm	
TGG-15min (OEL STEL)	384 mg/m³	
	100 ppm	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	100 mg/m³	
NDSCh (OEL STEL)	200 mg/m³	
Portugal - Occupational Exposure Limits		
OEL TWA	192 mg/m³ (indicative limit value)	

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Toluene (108-88-3)		
	50 ppm (indicative limit value)	
OEL STEL	384 mg/m³ (indicative limit value)	
	100 ppm (indicative limit value)	
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value	
Romania - Occupational Exposure Limits		
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Skin notation	
Romania - Biological limit values		
BLV	2 g/l Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift 3 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift	
Slovakia - Occupational Exposure Limits		
NPHV (OEL TWA)	192 mg/m³	
	50 ppm	
NPHV (OEL C)	384 mg/m³ (also biological monitoring considered)	
OEL chemical category	Potential for cutaneous absorption	
Slovakia - Biological limit values		
BLV	600 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of exposure or work shift 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: after all work shifts (for long-term exposure) 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of exposure or work shift 2401 mg/g creatinine Parameter: Hippuric acid - Sampling time: end of exposure or work shift	
Slovenia - Occupational Exposure Limits	·	
OEL TWA	192 mg/m³	
	50 ppm	
OEL STEL	384 mg/m³	
	100 ppm	
OEL chemical category	Category 2, Potential for cutaneous absorption	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	192 mg/m³ (indicative limit value)	
	50 ppm (indicative limit value)	
VLA-EC (OEL STEL)	384 mg/m³	
	100 ppm	
OEL chemical category	skin - potential for cutaneous absorption	

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Toluene (108-88-3)		
Spain - Biological limit values		
BLV	0.6 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift 0.05 mg/l Parameter: Toluene - Medium: blood - Sampling time: start of last shift of workweek 0.08 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	192 mg/m³	
	50 ppm	
KGV (OEL STEL)	384 mg/m³	
	100 ppm	
OEL chemical category	Skin notation	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA)	191 mg/m³	
	50 ppm	
WEL STEL (OEL STEL)	384 mg/m³	
	100 ppm	
WEL chemical category	Potential for cutaneous absorption	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA)	94 mg/m³	
	25 ppm	
Korttidsverdi (OEL STEL)	141 mg/m³ (value calculated)	
	37.5 ppm (value calculated)	
OEL chemical category	Skin notation	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	190 mg/m³	
	50 ppm	
KZGW (OEL STEL)	760 mg/m³	
	200 ppm	
OEL chemical category	Skin notation, Category 2 reproductive toxin	
Switzerland - BAT		
BAT	600 μg/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 6.48 μmol/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 2 g/g creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 0.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 4.62 μmol/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 75 μg/l Parameter: Toluol - Medium: urine - Sampling time: end of shift	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	20 ppm	

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Toluene (108-88-3)			
ACGIH chemical category	Not Classifiable as a Human Carcinogen		
USA - ACGIH - Biological Exposure Indices			
BEI	0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g creatinine Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)		
Dipropylene glycol monomethyl ether (34590-	94-8)		
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	308 mg/m³		
	50 ppm		
Remark	Possibility of significant uptake through the skin		
Austria - Occupational Exposure Limits			
MAK (OEL TWA)	307 mg/m³ (mixed isomers)		
	50 ppm (mixed isomers)		
MAK (OEL STEL)	614 mg/m³ (isomers mixtures)		
	100 ppm (isomers mixtures)		
OEL chemical category	Skin notation		
Belgium - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	Skin, Skin notation		
Bulgaria - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
Croatia - Occupational Exposure Limits			
GVI (OEL TWA)	308 mg/m³		
	50 ppm		
OEL chemical category	Skin notation		
Cyprus - Occupational Exposure Limits			
OEL TWA	308 mg/m³		
	50 ppm		
OEL chemical category	Skin-potential for cutaneous absorption		
Czech Republic - Occupational Exposure Limits	Czech Republic - Occupational Exposure Limits		
PEL (OEL TWA)	270 mg/m³		
OEL chemical category	Potential for cutaneous absorption		
Denmark - Occupational Exposure Limits			
OEL TWA	309 mg/m³		
	50 ppm		
OEL STEL	618 mg/m³		

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Dipropylene glycol monomethyl ether (34590-94-8)		
	100 ppm	
OEL chemical category	Potential for cutaneous absorption	
Estonia - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	
Finland - Occupational Exposure Limits		
HTP (OEL TWA)	310 mg/m³	
	50 ppm	
OEL chemical category	Potential for cutaneous absorption	
France - Occupational Exposure Limits		
VME (OEL TWA)	308 mg/m³ (restrictive limit)	
	50 ppm (restrictive limit)	
OEL chemical category	Risk of cutaneous absorption	
Germany - Occupational Exposure Limits (TRGS 90	00)	
AGW (OEL TWA)	310 mg/m³ (isomer mixture)	
	50 ppm (isomer mixture)	
Gibraltar - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	
Greece - Occupational Exposure Limits		
OEL TWA	600 mg/m³	
	100 ppm	
OEL STEL	900 mg/m³	
	150 ppm	
OEL chemical category	skin - potential for cutaneous absorption	
Hungary - Occupational Exposure Limits		
AK (OEL TWA)	308 mg/m³	
Ireland - Occupational Exposure Limits		
OEL TWA	308 mg/m³ ((2-Methoxymethylethoxy)propanol)	
	50 ppm ((2-Methoxymethylethoxy)propanol)	
OEL STEL	924 mg/m³ (calculated (2-(2-Methoxypropoxy)-1-propanol)	
	150 ppm (calculated (2-(2-Methoxypropoxy)-1-propanol)	
OEL chemical category	Potential for cutaneous absorption	
Italy - Occupational Exposure Limits		
OEL TWA	308 mg/m³ (1-(3-Methoxypropoxy)propan-1-ol)	
	50 ppm (1-(3-Methoxypropoxy)propan-1-ol)	
OEL chemical category	skin - potential for cutaneous absorption	

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Dipropylene glycol monomethyl ether (34590-94-8)		
Latvia - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	skin - potential for cutaneous exposure	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	300 mg/m³ (2-(2-Methoxypropoxy)-propanol)	
	50 ppm (2-(2-Methoxypropoxy)-propanol)	
TPRV (OEL STEL)	450 mg/m³ (2-(2-Methoxypropoxy)-propanol)	
	75 ppm (2-(2-Methoxypropoxy)-propanol)	
OEL chemical category	Skin notation	
Luxembourg - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Possibility of significant uptake through the skin	
Malta - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Possibility of significant uptake through the skin	
Netherlands - Occupational Exposure Limits		
TGG-8u (OEL TWA)	300 mg/m³	
	48.7 ppm	
Poland - Occupational Exposure Limits		
NDS (OEL TWA)	240 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol and 2-(2-Methoxy-1-methylethoxy)propan-1-ol)	
NDSCh (OEL STEL)	480 mg/m³ (mixture of isomers: 1-(2-Methoxy-1-methylethoxy)propan-2-ol, 1-(2-Methoxy-2-methylethoxy)propan-2-ol, 2-(2-Methoxy-1-methylethoxy)propan-1-ol)	
Portugal - Occupational Exposure Limits		
OEL TWA	308 mg/m³ (indicative limit value)	
	50 ppm (indicative limit value)	
OEL STEL	150 ppm	
OEL chemical category	skin - potential for cutaneous exposure indicative limit value	
Romania - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL chemical category	Skin notation	
Slovakia - Occupational Exposure Limits		
NPHV (OEL TWA)	308 mg/m³	
	50 ppm	
OEL chemical category	Potential for cutaneous absorption	

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Dipropylene glycol monomethyl ether (34590-94-8)		
Slovenia - Occupational Exposure Limits		
OEL TWA	308 mg/m³	
	50 ppm	
OEL STEL	308 mg/m³	
	50 ppm	
OEL chemical category	Potential for cutaneous absorption	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA)	308 mg/m³ (indicative limit value)	
	50 ppm (indicative limit value)	
OEL chemical category	skin - potential for cutaneous absorption	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	300 mg/m³	
	50 ppm	
KGV (OEL STEL)	450 mg/m³	
	75 ppm	
OEL chemical category	Skin notation	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA)	308 mg/m³	
	50 ppm	
WEL STEL (OEL STEL)	924 mg/m³ (calculated)	
	150 ppm (calculated)	
WEL chemical category	Potential for cutaneous absorption	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA)	300 mg/m³	
	50 ppm	
Korttidsverdi (OEL STEL)	375 mg/m³ (value calculated)	
	75 ppm (value calculated)	
OEL chemical category	Skin notation	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA)	300 mg/m³ (aerosol, vapour)	
	50 ppm (aerosol, vapour)	
KZGW (OEL STEL)	300 mg/m³ (aerosol, vapour)	
	50 ppm (aerosol, vapour)	
USA - ACGIH - Occupational Exposure Limits		
ACGIH OEL TWA	50 ppm (Dipropylene glycol methyl ether)	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

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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

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Hand protection:

Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

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 available Not available Freezing point Not available Boiling point Flammability Non flammable. Lower explosion limit Not available Upper explosion limit : Not available Flash point : > 93 °C Auto-ignition temperature Not available Decomposition temperature Not available рΗ Not available Viscosity, kinematic Not available Solubility Not available Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure

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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

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

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

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

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)	
benzaldehyde (100-52-7)		
LD50 oral rat	1292 mg/kg (Source: JAPAN_GHS)	
LD50 dermal rabbit	> 1250 mg/kg (Source: JAPAN_GHS)	
LC50 Inhalation - Rat	< 5 mg/l/4h	
Benzyl salicylate (118-58-1)		
LD50 oral rat	2227 mg/kg (Source: NLM_CIP)	
LD50 oral	2200 mg/kg bodyweight	

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Benzyl salicylate (118-58-1)	
LD50 dermal rabbit	> 5000 mg/kg (Source: CHEMVIEW)
COUMARIN (91-64-5)	
LD50 oral rat	> 5000 mg/kg (Source: JAPAN_GHS)
LD50 dermal rat	293 mg/kg (Source: ECHA_API)
acetophenone (98-86-2)	
LD50 oral rat	2081 mg/kg (Source: ECHA_API)
LD50 oral	500 mg/kg bodyweight
LD50 dermal rat	3300 mg/kg (Source: ECHA_API)
LC50 Inhalation - Rat	> 2.13 mg/l (Exposure time: 8 h Source: CHEMVIEW)
benzyl alcohol (100-51-6)	
LD50 oral rat	1230 mg/kg (Source: NLM_CIP)
LD50 oral	1570 mg/kg
Benzyl acetate (140-11-4)	
LD50 oral rat	2490 mg/kg (Source: JAPAN_GHS)
LD50 oral	2490 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Source: JAPAN_GHS)
Toluene (108-88-3)	
LD50 oral rat	2600 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	12000 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation - Rat	12.5 mg/l/4h
Dipropylene glycol monomethyl ether (34590-	94-8)
LD50 oral rat	5.35 g/kg (Source: NLM_HSDB)
LD50 dermal rabbit	9500 mg/kg (Source: NLM_CIP)
Skin corrosion/irritation : Additional information :	Not classified Based on available data, the classification criteria are not met
Serious eye damage/irritation :	Not classified
Additional information :	Based on available data, the classification criteria are not met
Respiratory or skin sensitisation : Additional information :	Not classified Based on available data, the classification criteria are not met
	Not classified
Additional information :	Based on available data, the classification criteria are not met
Carcinogenicity : Additional information :	Not classified Based on available data, the classification criteria are not met
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Benzyl acetate (140-11-4)	
IARC group	3 - Not classifiable
Toluene (108-88-3)	
IARC group	3 - Not classifiable
	Not classified Based on available data, the classification criteria are not met

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STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Toluene (108-88-3)

STOT-single exposure May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

Toluene (108-88-3)

STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

: Not classified

benzyl benzoate (120-51-4)

Viscosity, kinematic 7.456 mm²/s

Toluene (108-88-3)

Hydrocarbon Yes

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. 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

Hazardous to the aquatic environment, short–term

Hazardous to the aquatic environment, long-term

(acute)

•

(chronic)

: Harmful to aquatic life with long lasting effects.

(Chronic)		
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	
benzaldehyde (100-52-7)		
LC50 - Fish [1]	10.6 – 11.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through] Source: EPA)	
LC50 - Fish [2]	12.69 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static] Source: IUCLID)	
Benzyl salicylate (118-58-1)		
LC50 - Fish [1]	1.03 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)	
acetophenone (98-86-2)		
LC50 - Fish [1]	162 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	
LC50 - Fish [2]	155 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)	
benzyl alcohol (100-51-6)		
LC50 - Fish [1]	460 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)	

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benzyl alcohol (100-51-6)			
LC50 - Fish [2]	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)		
EC50 - Crustacea [1]	23 mg/l (Exposure time: 48 h - Species: water flea)		
Toluene (108-88-3)			
LC50 - Fish [1]	15.22 – 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)		
LC50 - Fish [2]	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)		
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
EC50 - Crustacea [2]	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
EC50 72h - Algae [1]	12.5 mg/l (Species: Pseudokirchneriella subcapitata [static])		
EC50 96h - Algae [1]	> 433 mg/l (Species: Pseudokirchneriella subcapitata)		
Dipropylene glycol monomethyl ether (34590-	94-8)		
LC50 - Fish [1]	> 10000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])		
EC50 - Crustacea [1]	1919 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
12.2. Persistence and degradability			
ALMOND CC-13220 5% in DPG			
Persistence and degradability	Not established.		
benzyl benzoate (120-51-4)			
Persistence and degradability	May cause long-term adverse effects in the environment.		
benzaldehyde (100-52-7)			
Persistence and degradability	Rapidly degradable		
Benzyl salicylate (118-58-1)			
Persistence and degradability	Rapidly degradable		
COUMARIN (91-64-5)			
Persistence and degradability	Rapidly degradable		
isopentyl acetate (123-92-2)			
Persistence and degradability	Rapidly degradable		
acetophenone (98-86-2)			
Persistence and degradability	Rapidly degradable		
benzyl alcohol (100-51-6)			
Persistence and degradability	Rapidly degradable		
Benzyl acetate (140-11-4)			
Persistence and degradability	Rapidly degradable		
Toluene (108-88-3)			
Persistence and degradability	Rapidly degradable		
Dipropylene glycol monomethyl ether (34590-	Dipropylene glycol monomethyl ether (34590-94-8)		
Persistence and degradability	Rapidly degradable		

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12.3. Bioaccumulative potential

ALMOND CC-13220 5% in DPG					
Bioaccumulative potential	Not established.				
benzyl benzoate (120-51-4)					
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)				
Bioaccumulative potential	Not established.				
benzaldehyde (100-52-7)					
BCF - Fish [1]	(no significant bioaccumulation)				
Partition coefficient n-octanol/water (Log Pow)	1.4 (at 25 °C)				
Benzyl salicylate (118-58-1)					
Partition coefficient n-octanol/water (Log Pow)	4				
isopentyl acetate (123-92-2)					
Partition coefficient n-octanol/water (Log Pow)	2.7 (at 35 °C)				
acetophenone (98-86-2)	acetophenone (98-86-2)				
Partition coefficient n-octanol/water (Log Pow)	1.63 – 1.65				
benzyl alcohol (100-51-6)					
Partition coefficient n-octanol/water (Log Pow)	1.05				
Benzyl acetate (140-11-4)					
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)				
Toluene (108-88-3)					
Partition coefficient n-octanol/water (Log Pow)	2.73 (at 20 °C (at pH 7)				
Dipropylene glycol monomethyl ether (34590-94-8)					
Partition coefficient n-octanol/water (Log Pow)	0.35 (at 25 °C (at pH 7)				

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations

HP Code

Ecological information

: Avoid release to the environment.

: HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one

: Dispose in a safe manner in accordance with local/national regulations.

or more sectors of the environment

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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					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
14.2. UN proper shipping	14.2. UN proper shipping name					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
14.3. Transport hazard o	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

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)	isopentyl acetate ; Toluene	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

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EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	benzyl benzoate ; benzaldehyde ; Benzyl salicylate ; acetophenone ; benzyl alcohol ; Toluene	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)	ALMOND CC-13220 5% in DPG; benzyl benzoate; Benzyl salicylate; Benzyl acetate	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
40.	isopentyl acetate ; Toluene	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.
48.	Toluene	Toluene

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)

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

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, Subcategory	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

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15.1.2. National regulations

France

Occupational diseases		
Code	Description	
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them	
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 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident 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 : None of the components are listed

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

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

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen – Ontwikkeling : Toluene is listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE

COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and

amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Asp. Tox. 1	Aspiration hazard, Category 1	
EUH208	Contains Benzyl salicylate, COUMARIN. May produce an allergic reaction.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Flam. Liq. 3	Flammable liquids, Category 3	

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Full text of H- and EUH-statements:		
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H336	May cause drowsiness or dizziness.	
H361d	Suspected of damaging the unborn child.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H400	Very toxic to aquatic life.	
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	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

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.