

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 01/04/2024 Version: 1.0

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

1.1. Floudet identifier	
Product form	: Mixture
Trade name	: Balsam & Cedar Candles 2024
Product code	<ul> <li>SKU:45375072000, 46261072000, 46262072000, 46284072000, 46280072000, 45364072000, 46263072000</li> </ul>
Product group	: Trade product
UFI	<ul> <li>DQ5S-F29R-UA0R-MNF3(4537507200, 4626207200, 4628407200, 4628007200, 4626107200)</li> <li>3T5S-Y205-5A08-8015(4536407200, 4626307200)</li> </ul>

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture

1.1 Product identifier

: Candles

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Illume Candles 10501 Elm Creek Boulevard N Minneapolis, MN 55369 T (952) 885-9600 <u>illumecandles.com</u>

EU Address Bloomingville A/S Lene Haus Vej 3-5 DK-7430 Ikast www.bloomingville.com

# 1.4. Emergency telephone number Emergency number : Bloomingville no. +45 9626 4645. Office hours 8-16.00 Monday-Thursday. 8-14.00 Friday. Danish Toxic line +45 8212 1212 SECTION 2: Hazards identification SECTION 2: Hazards identification Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin sensitisation, Category 1 H317 Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412 Full text of H-statements: see section 16 Adverse physicochemical, human health and environmental effects No additional information available Label elements

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

Hazard pictograms (CLP)

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	GHS07
Signal word (CLP)	: Warning
Contains	: D-Limonene; 3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl-; Eugenol; .alphaPinene;
	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-; Ethanone, 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-
	tetramethyl-2-naphthalenyl)-; Ethanone, 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8-tetramethyl-1H-
	3a,7-methanoazulen-5-yl)-, [3R-(3.alpha.,3a.beta.,7.beta.,8a.alpha.)]-; Cinnamaldehyde;
	Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction.
	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	: P261 - Avoid breathing dust/fume/gas.
	P273 - Avoid release to the environment.
	P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing
	protection.
	P302+P352 - IF ON SKIN: Wash with plenty of water.
	P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
	P362+P364 - Take off contaminated clothing and wash it before reuse.
2.3. Other hazards	

Other hazards which do not result in classification : Risk of thermal burns on contact with molten product.

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

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
D-Limonene	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-029-00-7	1 – 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl-	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Eugenol	CAS-No.: 97-53-0 EC-No.: 202-589-1	0.1 – 1	Eye Irrit. 2, H319 Skin Sens. 1A, H317
.alphaPinene	CAS-No.: 80-56-8 EC-No.: 201-291-9	0.1 – 1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-	CAS-No.: 13466-78-9 EC-No.: 236-719-3	0.1 – 1	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethanone, 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8- tetramethyl-2-naphthalenyl)-	CAS-No.: 54464-57-2 EC-No.: 259-174-3	0.1 – 1	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Ethanone, 1-(2,3,4,7,8,8a-hexahydro-3,6,8,8- tetramethyl-1H-3a,7-methanoazulen-5-yl)-, [3R- (3.alpha.,3a.beta.,7.beta.,8a.alpha.)]-	CAS-No.: 32388-55-9 EC-No.: 251-020-3	0.1 – 1	Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cinnamaldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Oxiranecarboxylic acid, 3-methyl-3-phenyl-, ethyl ester	CAS-No.: 77-83-8 EC-No.: 201-061-8	0.1 – 1	Skin Sens. 1B, H317 Aquatic Chronic 2, H411

#### **SECTION 4: First Aid measures**

4.1. Description of first aid measures		
First-aid measures general	: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.	
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.	
First-aid measures after skin contact	: IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.	
First-aid measures after eye contact	: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing if pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.	
First-aid measures after ingestion	: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul> <li>May cause an allergic skin reaction.</li> <li>May cause respiratory irritation.</li> <li>May cause an allergic skin reaction.</li> <li>Direct contact with eyes is likely to be irritating.</li> </ul>	

: May cause gastrointestinal irritation.

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

No additional information available

Symptoms/effects after ingestion

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Dry chemical. Carbon dioxide. Alcohol-resistant foam.</li><li>Do not use a heavy water stream.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Explosion hazard Reactivity in case of fire Hazardous decomposition products in case of fire	<ul> <li>Not flammable.</li> <li>Product is not explosive.</li> <li>None known.</li> <li>No information available.</li> </ul>	

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5.3. Advice for firefighters	
Precautionary measures fire	: Eliminate all ignition sources if safe to do so.
Firefighting instructions	<ul> <li>Use cold water spray to cool fire-exposed containers to minimize risk of rupture. Do not dispose of fire-fighting water in the environment. Dispose of in accordance with relevant local regulations. Prevent human exposure to fire, fumes, smoke and products of combustion.</li> </ul>
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			
General measures	: Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.		
6.1.1. For non-emergency personnel			
Protective equipment Emergency procedures	: Wear Protective equipment as described in Section 8. : Evacuate unnecessary personnel.		
6.1.2. For emergency responders			
Protective equipment	: For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			

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

6.3. Methods and material for containment and cleaning up		
For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Prevent entry to sewers and public waters.	
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).	

#### 6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Wear personal protective equipment. Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
7.2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep cool. Protect from sunlight. Keep away from ignition sources. Store away from incompatible materials. Protect from moisture.	
7.3. Specific end use(s)		

Candles.

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#### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1. National occupational exposure and biological limit values

D-Limonene (5989-27-5)		
Finland - Occupational Exposure Limits		
HTP (OEL TWA) [1]	140 mg/m³	
HTP (OEL TWA) [2]	25 ppm	
HTP (OEL STEL)	50 mg/m³ (15 min. average)	
HTP (OEL STEL) [ppm]	280 ppm (15 min. average)	
Germany - Occupational Exposure Limits (TRGS 90	)0)	
AGW (OEL TWA) [1]	28 mg/m³ (skin)	
AGW (OEL TWA) [2]	5 ppm (skin)	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	168 mg/m³ (skin)	
VLA-ED (OEL TWA) [2]	30 ppm (skin)	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	140 mg/m³	
Grenseverdi (OEL TWA) [2]	25 ppm	
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	
USA - ACGIH - Occupational Exposure Limits		
Remark (ACGIH)	OELs not established	
.alphaPinene (80-56-8)		
Belgium - Occupational Exposure Limits		
OEL TWA	20 ppm	
Estonia - Occupational Exposure Limits		
OEL TWA	150 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL TWA	25 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL STEL	300 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL STEL	50 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
Lithuania - Occupational Exposure Limits		
IPRV (OEL TWA)	150 mg/m³	
IPRV (OEL TWA) [ppm]	25 ppm	
TPRV (OEL STEL)	300 mg/m³	

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.alphaPinene (80-56-8)		
TPRV (OEL STEL) [ppm]	50 ppm	
Portugal - Occupational Exposure Limits		
OEL TWA	20 ppm (Turpentine and selected Monoterpenes)	
Chemical category	Sensitizer dermal, 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	
Chemical category	Sensitizer	
Sweden - Occupational Exposure Limits		
NGV (OEL TWA)	150 mg/m³	
NGV (OEL TWA) [ppm]	25 ppm	
KGV (OEL STEL)	300 mg/m³ (1); (1) 15 minutes average value	
KGV (OEL STEL) [ppm]	50 ppm (1); (1) 15 minutes average value	
Anmärkning (SE)	(1) 15 minutes average value	
Chemical category	Sensitizer	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	140 mg/m <sup>3</sup>	
Grenseverdi (OEL TWA) [2]	25 ppm	
Korttidsverdi (OEL STEL)	175 mg/m³ (value calculated)	
Korttidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)	
Chemical category	Skin notation	
USA - ACGIH - Occupational Exposure Limits		
Local name	α-Pinene	
ACGIH OEL TWA [ppm]	20 ppm	
Remark (ACGIH)	TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)	
ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer	
Regulatory reference	ACGIH 2024	
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- (13466-78-9)		
Belgium - Occupational Exposure Limits		
OEL TWA	20 ppm	
Estonia - Occupational Exposure Limits		
OEL TWA	150 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL TWA	25 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL STEL	300 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
OEL STEL	50 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)	
Chemical category	Sensitizer	
	1	

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Identical SequenceIPRVandSingmandIPRVandSingmandIPRVandSingmandIPRVandSingmandIPRVandSingmandIPrevand<	Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- (13466-78-9)		
PPRV (OEL TWA) [ppm]25 ppmTPRV (OEL STEL) [ppm]50 ppmChemical category50 ppmOrtugal - Occupational Exposure Limits20 ppm (Turpentine and selected Monoterpenes)Chemical category8 sensitizer dermal, A4 - Not Classifiable as a Human CarcinogenSpain - Occupational Exposure Limits20 ppm (Turpentine, including monoterpenes)VLA-ED (OEL TWA) [1]113 mg/m "(Turpentine, including monoterpenes)Spain - Occupational Exposure Limits20 ppm (Turpentine, including monoterpenes)VLA-ED (OEL TWA) [2]6 sensitizerSweden - Occupational Exposure Limits5 sensitizerNew (OEL TWA) [2]50 ppm (Turpentine, including monoterpenes)Sweden - Occupational Exposure Limits5 sensitizerNeW (OEL TWA) [ppm]50 ppm (Signal Signal S	Lithuania - Occupational Exposure Limits		
TPRV (OEL STEL)300 mg/m²TPRV (OEL STEL) [pm]50 pmChemical categorySemitizer conferous resin sensitizes the skinPortugal - Occupational Exposure Limits20 pm (Turpentine and selected Monoterpenes)Chemical categorySensitizer dermal, A4 - Not Classifiable as a Human CarcinogenSpain - Occupational Exposure LimitsVLAED (OEL TWA) [1]VLAED (OEL TWA) [2]20 pm (Turpentine, including monoterpenes)VLAED (OEL TWA) [2]20 pm (Turpentine, including monoterpenes)Sweden - Occupational Exposure LimitsSensitizerNGV (OEL TWA) [2]25 ppmNGV (OEL TWA) [pm]25 ppmNGV (OEL TWA) [pm]300 mg/m²KGV (OEL STEL)300 mg/m²KGV (OEL STEL) [pm]30 pmChemical categorySensitizerNorway - Occupational Exposure LimitsSensitizerResverdi (OEL TWA) [1]140 mg/m²Grenseverdi (OEL TWA) [2]25 ppmKortidsverdi (DEL STEL) [pm]37.5 pm (value calculated)Kortidsverdi (DEL STEL) [pm]15.5 pm (value calculated)Kortidsverdi (DEL STEL) [pm]15.5 pm (value calculated)Kortidsverdi (DEL STEL) [pm]37.5 pm (value calculate	IPRV (OEL TWA)	150 mg/m³	
TPRV (OEL STEL) [ppm]         50 pm           Chemical category         Sensitizer confierous resin sensitizes the skin           Portugal - Occupational Exposure Limits         0 pm (Turpentine and selected Monoterpenes)           Chemical category         Sensitizer dermal. AA - Not Classifiable as a Human Carcinogen           Spain - Occupational Exposure Limits         VLA-ED (OEL TWA) [1]         113 mg/m² (Turpentine, including monoterpenes)           VLA-ED (OEL TWA) [2]         20 pm (Turpentine, including monoterpenes)         Chemical category           Sonder - Occupational Exposure Limits         Sensitizer         Sensitizer           Swedon - Occupational Exposure Limits         Songm'         Sensitizer           NGV (OEL TWA) [pm]         150 mg/m²         Sensitizer           Swedon - Occupational Exposure Limits         Songm'         Sensitizer           KGV (OEL STEL) [pm]         26 ppm         Sensitizer           KGV (OEL STEL) [pm]         50 ppm         Sensitizer           Norvey - Occupational Exposure Limits         Sensitizer         Sensitizer           KGV (OEL STEL) [pm]         40 mg/m²         Genesseerdi (OEL TWA) [2]         Sep pm           Kortidsverdi (OEL TWA) [2]         25 ppm         Sensitizer         Sensitizer           Kortidsverdi (OEL TWA) [2]         25 ppm         Sensitizer <td< td=""><td>IPRV (OEL TWA) [ppm]</td><td>25 ppm</td></td<>	IPRV (OEL TWA) [ppm]	25 ppm	
Chemical category         Sensitizer coniterous resin sensitizes the skin           Portugal - Occupational Exposure Limits         20 ppm (Turpentine and selected Monoterpenes)           Chemical category         Sensitizer demai, A.4 - Not Classifiable as a Human Carcinogen           Spain - Occupational Exposure Limits         20 ppm (Turpentine, including monoterpenes)           VLA-ED (OEL TWA) [1]         113 mg/m² (Turpentine, including monoterpenes)           Chemical category         Sensitizer           Sweden - Occupational Exposure Limits         Sweden - Occupational Exposure Limits           NGV (OEL TWA) [2]         25 ppm           KGV (OEL TWA) [2]         300 mg/m²           KGV (OEL TWL)         300 mg/m²           KGV (OEL TWL) [pm]         50 ppm           KGV (OEL STEL) [pm]         50 ppm           KGV (OEL STEL) [pm]         50 ppm           Chemical category         Sensitizer           Norway - Occupational Exposure Limits         Sensitizer           KGV (OEL STEL) [pm]         140 mg/m²           Grenseverdi (OEL TWA) [1]         140 mg/m²           Grenseverdi (OEL TWA) [2]         25 ppm           Korttdsverdi (OEL STEL) [ppm]         175 mg/m² (value calculated)           Korttdsverdi (OEL TWA) [2]         26 ppm           Korttdsverdi (OEL TWA) [2]         3-3-G	TPRV (OEL STEL)	300 mg/m³	
Portugal - Occupational Exposure Limits         20 ppm (Turpentine and selected Monoterpenes)           Chemical category         Sensitizer dermal, A4 - Not Classifiable as a Human Carcinogen           Spain - Occupational Exposure Limits         VLA-ED (OEL TWA) [1]         113 mg/m² (Turpentine, including monoterpenes)           VLA-ED (OEL TWA) [2]         20 ppm (Turpentine, including monoterpenes)         Chemical category           Sweden - Occupational Exposure Limits         Sensitizer           Sweden - Occupational Exposure Limits         Song/m²           NGV (OEL TWA) [2]         150 mg/m²           NGV (OEL TWA) [ppm]         25 ppm           KGV (OEL STEL) [ppm]         300 mg/m²           NGV (OEL STEL) [ppm]         50 ppm           Chemical category         Sensitizer           Norway - Occupational Exposure Limits         Sensitizer           Grenseverdi (OEL STEL) [ppm]         140 mg/m²           Grenseverdi (OEL TWA)[1]         140 mg/m²           Grenseverdi (OEL STEL) [ppm]         37 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37 ppm (value calculated)	TPRV (OEL STEL) [ppm]	50 ppm	
OEL TWA20 ppm (Turpentine and selected Monoterpenes)Chemical categorySensitizer dermal, A4 - Not Classifiable as a Human CarcinogenSpain - Occupational Exposure Limits113 mg/m² (Turpentine, including monoterpenes)VLA-ED (OEL TWA) [1]113 mg/m² (Turpentine, including monoterpenes)Chemical categorySensitizerSweden - Occupational Exposure LimitsSensitizerNGV (OEL TWA) [OPm]150 mg/m²NGV (OEL TWA) [Opm]25 ppmKGV (OEL STEL)300 mg/m²KGV (OEL STEL) [ppm]50 ppmChemical categorySensitizerNorway - Occupational Exposure LimitsGrenseverdi (OEL TWA) [1]140 mg/m²Grenseverdi (OEL TWA) [2]25 ppmKortldsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Kortldsverdi (OEL STEL) [ppm]20 ppmRenark (ACGIH)17.0 @ Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen, dermal sensitizerLocal nameA-3-CareneACGIH Occupational Exposure LimitsACGIH Joccupational Exposure LimitsRegulatory referenceA-GCIH JOCURegulatory referenceACGIH Joccupational Exposure LimitsBelgium - Occupational Exposure LimitsCocupational Exposure Limits <t< td=""><td>Chemical category</td><td>Sensitizer coniferous resin sensitizes the skin</td></t<>	Chemical category	Sensitizer coniferous resin sensitizes the skin	
Chemical category         Sensitizer dermal, A4 - Not Classifiable as a Human Carcinogen           Spain - Occupational Exposure Limits         113 mg/m² (Turpentine, including monoterpenes)           VLA-ED (OEL TWA) [1]         113 mg/m² (Turpentine, including monoterpenes)           Chemical category         Sensitizer           Sweden - Occupational Exposure Limits         Sensitizer           NGV (OEL TWA) [2]         25 ppm           NGV (OEL TWA) (ppm]         25 ppm           KGV (OEL STEL)         300 mg/m²           KGV (OEL STEL) [ppm]         50 ppm           Chemical category         Sensitizer           Norway - Occupational Exposure Limits         50 ppm           Grenseverdi (DEL TWA) [1]         140 mg/m²           Grenseverdi (DEL TWA) [2]         25 ppm           Kortidsverdi (DEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (DEL STEL) [pm]         37.5 ppm (value calculated)           Chemical category         Alergenic substance           USA - ACGIH - Occupational Exposure Limits         20 ppm           Redict - Occupational Exposure Limits         20 ppm           Chemical category         Alergenic substance           USA - ACGIH - Occupational Exposure Limits         20 ppm           Redich encicategory         Not Classifiable as a Human Car	Portugal - Occupational Exposure Limits		
Spain - Occupational Exposure Limits           VLA-ED (OEL TWA) [1]         113 mg/m² (Turpentine, including monoterpenes)           VLA-ED (OEL TWA) [2]         20 ppm (Turpentine, including monoterpenes)           Chemical category         Sensitizer           Sweden - Occupational Exposure Limits         NGV (OEL TWA)           NGV (OEL TWA)         150 mg/m²           NGV (OEL TWA)         50 mg/m²           NGV (OEL TWA)         50 mg/m²           NGV (OEL STEL)         300 mg/m²           KGV (OEL STEL) [ppm]         50 ppm           Chemical category         Sensitizer           Norwar - Occupational Exposure Limits         Sensitizer           Grenseverdi (OEL TWA) [1]         140 mg/m²           Grenseverdi (OEL TWA) [2]         25 ppm           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Chemical category         Allergenic substance           USA - ACGIH - Occupational Exposure Limits         Second           Grene         AcGid Hocle TWA [ppm]           Chemical category         Nut Classifiable as a Human Carcinogen, dermal sensitizer           ACGIH Occupational Exposure Limits	OEL TWA	20 ppm (Turpentine and selected Monoterpenes)	
VLA-ED (OEL TWA) [1]113 mg/m² (Turpentine, including monoterpenes)VLA-ED (OEL TWA) [2]20 pm (Turpentine, including monoterpenes)Chemical categorySensitizerSwedon - Occupational Exposure Limits150 mg/m²NGV (OEL TWA) [pm]55 pmKGV (OEL STEL) [pm]300 mg/m²KGV (OEL STEL) [ppm]50 ppmChemical categorySensitizerNorway - Occupational Exposure LimitsSensitizerGrenseverdi (OEL TWA) [1]140 mg/m²Grenseverdi (OEL TWA) [2]25 ppmGrenseverdi (OEL TWA) [2]25 ppmKottidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Kottidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Chemical categoryAllergenic substanceUSA - ACGH - Occupational Exposure LimitsLocal nameA-3-CareneACGIH OL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basi: Lung ir: Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH categoryAlci Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-274)Balgium - Occupational Exposure LimitsCotta - Occupational Exposure LimitsCotta - Occupational Exposure LimitsGVI (OEL TWA) referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-274)Balgium - Occupational Exposure LimitsGVI (OEL TWA) [1]Chemical CategoryACGIH Cole TWA) [1]Chemical Category LimitsSVI (OEL TWA) [1]<	Chemical category	Sensitizer dermal, A4 - Not Classifiable as a Human Carcinogen	
VLA-ED (OEL TWA) [2]         20 ppm (Turpentine, including monoterpenes)           Chemical category         Sensitizer           Sweden - Occupational Exposure Limits         150 mg/m³           NGV (OEL TWA) [pm]         25 ppm           KGV (OEL STEL)         300 mg/m³           KGV (OEL STEL) [ppm]         60 ppm           Chemical category         Sensitizer           Norway - Occupational Exposure Limits         Sensitizer           Grenseverdi (OEL TWA) [1]         140 mg/m³           Grenseverdi (OEL TWA) [2]         25 ppm           Kortidsverdi (OEL STEL)         25 ppm           Kortidsverdi (OEL STEL) [ppm]         26 ppm           Kortidsverdi (OEL STEL) [ppm]         27 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         20 ppm           Record Coll TWA [ppm]         20 ppm           Record TWA [ppm]         20 ppm           Record TWA [ppm]         20 ppm           Record TWA [ppm]         20 ppm	Spain - Occupational Exposure Limits		
Chemical category         Sensitizer           Sweden - Occupational Exposure Limits         150 mg/m³           NGV (OEL TWA) [ppm]         25 ppm           KGV (OEL STEL)         300 mg/m³           KGV (OEL STEL) [ppm]         50 ppm           Chemical category         Sensitizer           Norway - Occupational Exposure Limits         50 ppm           Grenseverdi (OEL TWA) [1]         140 mg/m³           Grenseverdi (OEL TWA) [2]         25 ppm           Kortidsverdi (OEL STEL)         175 mg/m³ (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         20 ppm           Recol Iname         ^3-Carene           ACGIH Occupational Exposure Limits         20 ppm           Regulatory reference         ACGIH 2024           Paraffin waxes and Hydrocarbon waxes (8027-422         Paraffin waxes and Hydrocarbon waxes (8027-422)           Belgium - Occupational Exposure Limits         Coratia - Occupational Exposure Limi	VLA-ED (OEL TWA) [1]	113 mg/m <sup>3</sup> (Turpentine, including monoterpenes)	
Sweden - Occupational Exposure Limits           NGV (OEL TWA)         150 mg/m³           NGV (OEL TWA) (ppm]         25 ppm           KGV (OEL STEL)         300 mg/m³           KGV (OEL STEL) (ppm)         50 ppm           Chemical category         Sensitizer           Norwar - Occupational Exposure Limits         40 mg/m³           Grenseverdi (OEL TWA) [1]         140 mg/m³           Grenseverdi (OEL STEL)         25 ppm           Kortidsverdi (OEL STEL)         175 mg/m³ (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Chemical category         Allergenic substance           USA - ACGIH - Occupational Exposure Limits         Jop pm           Local name         A-3-Carene           ACGIH OEL TWA (ppm)         20 ppm           Remark (ACGIH)         TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)           ACGIH oberical category         Not Classifiable as a Human Carcinogen, dermal sensitizer           Regulatory reference         ACGIH 2024           Paraffin waxes and Hydrocarbon waxes (800-27+2)         Belgium - Occupational Exposure Limits           Cett TWA         2 mg/m² (fume)           Croatia - Occupational Exposure Limits         Zmg/m² (fume)           Greta - Occupation	VLA-ED (OEL TWA) [2]	20 ppm (Turpentine, including monoterpenes)	
NGV (OEL TWA)150 mg/m³NGV (OEL TWA) (ppm)25 ppmKGV (OEL STEL)300 mg/m³KGV (OEL STEL) (ppm)50 ppmChemical categorySensitizerNorway - Occupational Exposure Limits140 mg/m³Grenseverdi (OEL TWA) [1]140 mg/m³ (value calculated)Grenseverdi (OEL STEL)25 ppmKottidsverdi (OEL STEL) (ppm)37.5 ppm (value calculated)Kottidsverdi (OEL STEL) (ppm)37.5 ppm (value calculated)Kottidsverdi (OEL STEL) (ppm)37.5 ppm (value calculated)Kottidsverdi (OEL STEL) (ppm)37.5 ppm (value calculated)Chemical categoryAllergenic substanceUSA - ACGIH - Occupational Exposure Limits1V@ Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH OEL TWA (ppm)20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002-t4-2)Belgium - Occupational Exposure Limits2 mg/m³ (fume)Cotat - Occupational Exposure Limits2 mg/m³ (fume)Crotat - Occupational Exposure Limits2 mg/m³ (fume)GVI (OEL TWA) [1]2 mg/m³ (fume)	Chemical category	Sensitizer	
NGV (OEL TWA) [ppm]25 ppmKGV (OEL STEL)300 mg/m³KGV (OEL STEL) [ppm]50 ppmChemical categorySensitizerNorway - Occupational Exposure Limits140 mg/m³Grenseverdi (OEL TWA) [1]140 mg/m³ (value calculated)Grenseverdi (OEL TWA) [2]25 ppmKorttidsverdi (OEL STEL)75 mg/m³ (value calculated)Korttidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Korttidsverdi (OEL TWA) [ppm]37.5 ppm (value calculated)ACGIH - Occupational Exposure Limits140 engenics USEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-22-22-22-22-22-22-22-22-22-22-22-22-2	Sweden - Occupational Exposure Limits	·	
KGV (OEL STEL) [ppm]300 mg/m³KGV (OEL STEL) [ppm]SensitzerOnemical categorySensitzerNorway - Occupational Exposure Limits140 mg/m³Grenseverdi (OEL TWA) [1]140 mg/m³ (value calculated)Grenseverdi (OEL TWA) [2]25 ppmKorttidsverdi (OEL STEL)175 mg/m³ (value calculated)Korttidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Chemical categoryAlegenic substanceUSA - ACGIH - Occupational Exposure Limits20 ppmLocal nameA-3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TL/V® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffir waxes and Hydrocarbon waxes (80°CCTUR®)Paraffir waxes and Hydrocarbon timesTUR®)Cotati - Occupational Exposure LimitsSensifiable as a Human Carcinogen, dermal sensitizerOLI TWA2 mg/m³ (fume)Crotati - Occupational Exposure LimitsSensifiable as a Human Carcinogen, dermal sensitizerOLI TWA2 mg/m³ (fume)Crotati - Occupational Exposure LimitsSensifiable as a Human Carcinogen, dermal sensitizerOLI TWA2 mg/m³ (fume)Crotati - Occupational Exposure LimitsSensifiable as a Human Carcinogen, dermal sensitizerGVI (OEL TWA) [1]2 mg/m³ (fume)	NGV (OEL TWA)	150 mg/m³	
KGV (OEL STEL) [ppm]50 pmChemical categorySensitizerNorway - Occupational Exposure LimitsGrenseverdi (OEL TWA) [1]140 mg/m³Grenseverdi (OEL TWA) [2]25 ppmKottidisverdi (OEL STEL)75 mg/m³ (value calculated)Kottidisverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Chemical categoryAllergenic substanceUSA - ACGIH - Occupational Exposure LimitsLocal nameA-3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TU @ Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH ActineACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002-7-2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (tume)Coratia - Occupational Exposure LimitsOEL TWA2 mg/m³ (tume)Kordi (OEL STEL)2 mg/m³ (tume)	NGV (OEL TWA) [ppm]	25 ppm	
Chemical category         Sensitizer           Norway - Occupational Exposure Limits         140 mg/m³           Grenseverdi (OEL TWA) [1]         140 mg/m³ (value calculated)           Grenseverdi (OEL STEL)         75 mg/m³ (value calculated)           Korttidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Chemical category         Allergenic substance           USA - ACGIH - Occupational Exposure Limits         -           Local name         -3-3 Carene           ACGIH OEL TWA [ppm]         20 ppm           Remark (ACGIH)         TU Ve Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)           ACGIH Acgury reference         ACGIH 2024           Paraffin waxes and Hydrocarbon waxes (8002-74-2)         Elegium - Occupational Exposure Limits           OEL TWA         2 mg/m³ (fume)           Croatia - Occupational Exposure Limits         2           VGL (OEL TWA)         2 mg/m³ (fume)	KGV (OEL STEL)	300 mg/m <sup>3</sup>	
Norway - Occupational Exposure Limits         I40 mg/m³           Grenseverdi (OEL TWA) [1]         140 mg/m³           Grenseverdi (OEL TWA) [2]         25 ppm           Kortidsverdi (OEL STEL)         175 mg/m³ (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Kortidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Chemical category         Allergenic substance           USA - ACGIH - Occupational Exposure Limits         Local name           Local name         A-3-Carene           ACGIH OEL TWA [ppm]         20 ppm           Remark (ACGIH)         TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)           ACGIH chemical category         Not Classifiable as a Human Carcinogen, dermal sensitizer           Regulatory reference         ACGIH 2024           Paraffin waxes and Hydrocarbon waxes (8002-74-2)         Belgium - Occupational Exposure Limits           OEL TWA         2 mg/m³ (fume)           Croatia - Occupational Exposure Limits         2 mg/m³ (fume)           Groatia - Occupational Exposure Limits         2 mg/m³ (fume)	KGV (OEL STEL) [ppm]	50 ppm	
Grenseverdi (OEL TWA) [1]140 mg/m³Grenseverdi (OEL TWA) [2]25 ppmKorttidsverdi (OEL STEL)175 mg/m³ (value calculated)Korttidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Chemical categoryAllergenic substanceUSA - ACGIH - Occupational Exposure LimitsLocal nameA-3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002	Chemical category	Sensitizer	
Grenseverdi (OEL TWA) [2]         25 ppm           Korttidsverdi (OEL STEL)         175 mg/m³ (value calculated)           Korttidsverdi (OEL STEL) [ppm]         37.5 ppm (value calculated)           Chemical category         Allergenic substance           USA - ACGIH - Occupational Exposure Limits           Local name         A-3-Carene           ACGIH OEL TWA [ppm]         20 ppm           Remark (ACGIH)         TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)           ACGIH chemical category         Not Classifiable as a Human Carcinogen, dermal sensitizer           Regulatory reference         ACGIH 2024           Paraffin waxes and Hydrocarbon waxes (8027+2)           Belgium - Occupational Exposure Limits         2 mg/m³ (fume)           OEL TWA         2 mg/m³ (fume)           Greatia - Occupational Exposure Limits         6 mg/m³ (fume)	Norway - Occupational Exposure Limits	·	
Kortidsverdi (OEL STEL)175 mg/m³ (value calculated)Kortidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Chemical categoryAllergenic substanceUSA - ACGIH - Occupational Exposure LimitsLocal name $\Delta$ -3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002-74-2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)GvI (OEL TWA) [1]2 mg/m³ (fume)GVI (OEL STEL)6 mg/m³ (fume)	Grenseverdi (OEL TWA) [1]	140 mg/m³	
Korttidsverdi (OEL STEL) [ppm]37.5 ppm (value calculated)Korttidsverdi (OEL STEL) [ppm]Allergenic substanceUSA - ACGIH - Occupational Exposure LimitsLocal name $\Delta$ -3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-27+22)Belgium - Occupational Exposure Limits2 mg/m³ (fume)Croatia - Occupational Exposure Limits2 mg/m³ (fume)GVI (OEL TWA) [1]2 mg/m³ (fume)KoVI (OEL STEL)6 mg/m³ (fume)	Grenseverdi (OEL TWA) [2]	25 ppm	
Chemical categoryAllergenic substanceUSA - ACGIH - Occupational Exposure LimitsLocal nameA-3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-7-4-2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)Croatia - Occupational Exposure LimitsGVI (OEL TWA) [1]2 mg/m³ (fume)GVI (OEL STEL)6 mg/m³ (fume)	Korttidsverdi (OEL STEL)	175 mg/m³ (value calculated)	
USA - ACGIH - Occupational Exposure Limits         Local name       Δ-3-Carene         ACGIH OEL TWA [ppm]       20 ppm         Remark (ACGIH)       TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)         ACGIH chemical category       Not Classifiable as a Human Carcinogen, dermal sensitizer         Regulatory reference       ACGIH 2024         Paraffin waxes and Hydrocarbon waxes (800	Korttidsverdi (OEL STEL) [ppm]	37.5 ppm (value calculated)	
Local nameΔ-3-CareneACGIH OEL TWA [ppm]20 ppmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)Croatia - Occupational Exposure LimitsGVI (OEL TWA) [1]2 mg/m³ (fume)GVI (OEL STEL)6 mg/m³ (fume)	Chemical category	Allergenic substance	
ACGIH OEL TWA [ppm]20 pmRemark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (800-z+z+2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)Croatia - Occupational Exposure LimitsGVI (OEL TWA)[1]2 mg/m³ (fume)KGVI (OEL STEL)6 mg/m³ (fume)			
Remark (ACGIH)TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002-74-2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)Croatia - Occupational Exposure LimitsGVI (OEL TWA) [1]2 mg/m³ (fume)KGVI (OEL STEL)6 mg/m³ (fume)	Local name	∆-3-Carene	
ACGIH chemical categoryNot Classifiable as a Human Carcinogen, dermal sensitizerRegulatory referenceACGIH 2024Paraffin waxes and Hydrocarbon waxes (8002-74-2)Belgium - Occupational Exposure LimitsOEL TWA2 mg/m³ (fume)Croatia - Occupational Exposure LimitsGVI (OEL TWA) [1]2 mg/m³ (fume)KGVI (OEL STEL)6 mg/m³ (fume)	ACGIH OEL TWA [ppm]	20 ppm	
Regulatory reference     ACGIH 2024       Paraffin waxes and Hydrocarbon waxes (8002-74-2)       Belgium - Occupational Exposure Limits       OEL TWA     2 mg/m³ (fume)       Croatia - Occupational Exposure Limits       GVI (OEL TWA) [1]     2 mg/m³ (fume)       KGVI (OEL STEL)     6 mg/m³ (fume)	Remark (ACGIH)	TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)	
Paraffin waxes and Hydrocarbon waxes (8002-74-2)       Belgium - Occupational Exposure Limits       OEL TWA     2 mg/m³ (fume)       Croatia - Occupational Exposure Limits       GVI (OEL TWA) [1]     2 mg/m³ (fume)       KGVI (OEL STEL)     6 mg/m³ (fume)	ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer	
Belgium - Occupational Exposure Limits         OEL TWA       2 mg/m³ (fume)         Croatia - Occupational Exposure Limits         GVI (OEL TWA) [1]       2 mg/m³ (fume)         KGVI (OEL STEL)       6 mg/m³ (fume)	Regulatory reference	ACGIH 2024	
OEL TWA     2 mg/m³ (fume)       Croatia - Occupational Exposure Limits       GVI (OEL TWA) [1]     2 mg/m³ (fume)       KGVI (OEL STEL)     6 mg/m³ (fume)	Paraffin waxes and Hydrocarbon waxes (8002-74-2)		
Croatia - Occupational Exposure Limits         GVI (OEL TWA) [1]       2 mg/m³ (fume)         KGVI (OEL STEL)       6 mg/m³ (fume)	Belgium - Occupational Exposure Limits		
GVI (OEL TWA) [1]     2 mg/m³ (fume)       KGVI (OEL STEL)     6 mg/m³ (fume)	OEL TWA	2 mg/m³ (fume)	
KGVI (OEL STEL) 6 mg/m <sup>3</sup> (fume)	Croatia - Occupational Exposure Limits		
	GVI (OEL TWA) [1]	2 mg/m³ (fume)	
Denmark - Occupational Exposure Limits	KGVI (OEL STEL)	6 mg/m³ (fume)	
	Denmark - Occupational Exposure Limits		
OEL TWA [1] 2 mg/m <sup>3</sup> (fume)	OEL TWA [1]	2 mg/m³ (fume)	

#### Safety Data Sheet

Paraffin waxes and Hydrocarbon waxes (8002	2-74-2)	
OEL STEL	4 mg/m³ (fume)	
Estonia - Occupational Exposure Limits		
OEL TWA	2 mg/m³ (fume)	
Finland - Occupational Exposure Limits		
HTP (OEL TWA) [1]	1 mg/m³ (fume)	
France - Occupational Exposure Limits		
VME (OEL TWA)	2 mg/m³ (fume)	
Greece - Occupational Exposure Limits		
OEL TWA	2 mg/m³ (fume)	
OEL STEL	6 mg/m³ (fume)	
Ireland - Occupational Exposure Limits		
OEL TWA [1]	2 mg/m³ (fume)	
OEL STEL	6 mg/m³ (respirable dust)	
Poland - Occupational Exposure Limits	·	
NDS (OEL TWA)	2 mg/m³ (inhalable fraction)	
Portugal - Occupational Exposure Limits		
OEL TWA	2 mg/m³ (fume)	
Romania - Occupational Exposure Limits		
OEL TWA	2 mg/m³ (fume)	
OEL STEL	6 mg/m³ (fume)	
Slovakia - Occupational Exposure Limits		
NPHV (OEL TWA) [1]	2 mg/m³ (fume)	
NPHV (OEL C)	6 mg/m³ (fume)	
Spain - Occupational Exposure Limits		
VLA-ED (OEL TWA) [1]	2 mg/m³	
United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1]	2 mg/m³ (fume)	
WEL STEL (OEL STEL)	6 mg/m³ (fume)	
Norway - Occupational Exposure Limits		
Grenseverdi (OEL TWA) [1]	2 mg/m³ (fume)	
Korttidsverdi (OEL STEL)	4 mg/m³ (value calculated-fume)	
Switzerland - Occupational Exposure Limits		
MAK (OEL TWA) [1]	2 mg/m³ (respirable dust)	
USA - ACGIH - Occupational Exposure Limits		
Local name	Paraffin wax fume	
ACGIH OEL TWA	2 mg/m³ (fume)	
Remark (ACGIH)	TLV® Basis: URT irr; nausea	
Regulatory reference	ACGIH 2024	

#### Safety Data Sheet

Octadecyl 3-(3',5'-di-tert-butyl-4'-h	ydroxyphenyl)propionate (2082-79-3)
Germany - Occupational Exposure Lim	its (TRGS 900)
AGW (OEL TWA) [1]	20 mg/m <sup>3</sup> (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Slovenia - Occupational Exposure Lim	its
OEL TWA	20 mg/m³ (inhalable fraction)
OEL STEL	40 mg/m³ (inhalable fraction)
.betaPinene (127-91-3)	
Belgium - Occupational Exposure Lim	ts
OEL TWA	20 ppm
Denmark - Occupational Exposure Lim	its
OEL TWA [1]	140 mg/m³
OEL TWA [2]	25 ppm
OEL STEL	280
OEL STEL	50 ppm
Estonia - Occupational Exposure Limit	S
OEL TWA	150 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)
OEL TWA	25 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)
OEL STEL	300 mg/m <sup>3</sup> (Turpentine produced from Nordic conifers has an irritating effect on the skin monoterpenes, with the exception of 3-Carene, have a lesser effect)
OEL STEL	50 ppm (Turpentine produced from Nordic conifers has an irritating effect on the skin, monoterpenes, with the exception of 3-Carene, have a lesser effect)
Lithuania - Occupational Exposure Lin	nits
IPRV (OEL TWA)	150 mg/m³
IPRV (OEL TWA) [ppm]	25 ppm
TPRV (OEL STEL)	300 mg/m <sup>3</sup>
TPRV (OEL STEL) [ppm]	50 ppm
Portugal - Occupational Exposure Lim	its
OEL TWA	20 ppm (Turpentine and selected Monoterpenes)
Chemical category	Sensitizer dermal, 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
Chemical category	Sensitizer
Sweden - Occupational Exposure Limi	ts
NGV (OEL TWA)	150 mg/m³
NGV (OEL TWA) [ppm]	25 ppm
KGV (OEL STEL)	300 mg/m³ (1); (1) 15 minutes average value
KGV (OEL STEL) [ppm]	50 ppm (1); (1) 15 minutes average value

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.betaPinene (127-91-3)		
Anmärkning (SE)	(1) 15 minutes average value	
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		
Local name	β-Pinene	
ACGIH OEL TWA [ppm]	20 ppm	
Remark (ACGIH)	TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)	
ACGIH chemical category	Not Classifiable as a Human Carcinogen, dermal sensitizer	
Regulatory reference	ACGIH 2024	

#### 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:

Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Gloves. Protective goggles. Wear labcoat with full coverage clothing.

Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

#### Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles [EN 166]

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure. [EN 14605:2005 and EN 13034:2005]

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#### Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl. Suitable gloves for this specific application can be recommended by the glove supplier.

#### 8.2.2.3. Respiratory protection

#### **Respiratory protection:**

Where vapour, mist, or dust exceed PELs or other applicable OELs, use European Standard EN 529:2005 approved dust/particulate respiratory protective equipment

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

No additional information available

#### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	· Solid
Colour	· Not available
Odour	: Characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	· Not available
Boiling point	: Not available
Flammability	: Not available
Explosive limits	: Not applicable
Lower explosive limit (LEL)	: Not applicable
Upper explosive limit (UEL)	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
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	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

#### 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

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# SECTION 10: Stability and reactivity 10.1. Reactivity No dangerous reactions known under normal conditions of use. 10.2. Chemical stability Stable under normal conditions. 10.3. Possibility of hazardous reactions None under normal conditions. 10.4. Conditions to avoid

None under normal use.

10.5. Incompatible materials

None known.

**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 define	d in Regulation (EC) No 1272/2008	
Acute toxicity (oral):Acute toxicity (dermal):Acute toxicity (inhalation):	Not classified Not classified Not classified	
D-Limonene (5989-27-5)		
LD50 oral rat	4400 mg/kg	
LD50 dermal rabbit	> 5000 mg/kg	
3-Cyclohexene-1-carboxaldehyde, 2,4-dimethy	yl- (68039-49-6)	
LD50 oral	3900 mg/kg bodyweight	
Eugenol (97-53-0)		
LD50 oral rat	1930 mg/kg	
LD50 oral	2500 mg/kg bodyweight	
LC50 Inhalation - Rat (Vapours)	> 2580 mg/l	
.alphaPinene (80-56-8)		
LD50 oral rat	2100 mg/kg Source: International Uniform ChemicaL Information Database	
LD50 oral	500 mg/kg bodyweight	
LD50 dermal rat	> 5000 mg/kg	
Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl- (13466-78-9)		
LD50 oral rat	4800 mg/kg	
LD50 oral	4800 mg/kg bodyweight	
LC50 Inhalation - Rat (Dust/Mist)	1.5 mg/l/4h	

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D50 oral	4500 mg/kg bodyweight
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)
Oxiranecarboxylic acid, 3-methyl-3-p	henyl-, ethyl ester (77-83-8)
LD50 oral rat	5470 mg/kg
LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
Cinnamaldehyde (104-55-2)	
LD50 oral rat	2220 mg/kg (Source: NLM_CIP)
LD50 oral	2200 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg Source: IUCLID
LD50 dermal rabbit	> 2000 mg/kg
LD50 dermal	1100 mg/kg bodyweight
LC50 Inhalation - Rat [ppm]	6888871 ppm Animal: rat, Guideline: other:
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Base substance was sensitizing in a Guinea Pig Maximization Test (OECD 406)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

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 %

#### 11.2.2. Other information

No information available.

#### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general

Hazardous to the aquatic environment, short–term (acute) Hazardous to the aquatic environment, long–term (chronic)

- : No information available.
- : Not classified
- : Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessmen	t
No additional information available	
12.6. Endocrine disrupting properties	
Adverse effects on the environment caused by endocrine disrupting properties	: 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 %
12.7. Other adverse effects	

No additional information available

SECTION 13: Disposal considerations	;
13.1. Waste treatment methods	
Waste treatment methods	: Do not discharge to public wastewater systems without permit of pollution control authorities.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information	
In accordance with ADR / IMDG / IATA / ADN / RID	
14.1. UN number or ID number	
UN-No. (ADR) UN-No. (IMDG) UN-No. (IATA) UN-No. (ADN) UN-No. (RID)	<ul> <li>Not regulated for transport</li> </ul>
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)	<ul> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> <li>Not regulated</li> </ul>
14.3. Transport hazard class(es)	
ADR Transport hazard class(es) (ADR)	: Not regulated
IMDG Transport hazard class(es) (IMDG)	: Not regulated
IATA Transport hazard class(es) (IATA)	: Not regulated
ADN Transport hazard class(es) (ADN)	: Not regulated
<b>RID</b> Transport hazard class(es) (RID)	: Not regulated

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14.4. Packing group	
Packing group (ADR)	: Not regulated
Packing group (IMDG)	: Not regulated
Packing group (IATA)	: Not regulated
Packing group (ADN)	: Not regulated
Packing group (RID)	: Not regulated
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport Not regulated	
Transport by sea (IMDG) Not regulated	
Air transport (IATA) Not regulated	
Inland waterway transport Not regulated	
Rail transport Not regulated	
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

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

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

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

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### 15.1.2. National regulations

All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA

German	y
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Water hazard class (WGK)	: WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)
WGK remark	<ul> <li>Classification based on the components in compliance withVerwaltungsvorschrift wassergefährdender Stoffe (VwVwS)</li> </ul>
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject to the Hazardous Incident Ordinance (12. BImSchV)
List of sensitizing substances (TRGS 907)	: Contains sensitizing substances according TRGS 907
Netherlands	
SZW-lijst van kankerverwekkende stoffen	<ul> <li>3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl-,Paraffin waxes and Hydrocarbon waxes,Petrolatum,Hydrogenated soybean oil,Slack wax, petroleum are listed</li> </ul>

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SZW-lijst van mutagene stoffen SZW-lijst van reprotoxische stoffen – Borstvoeding SZW-lijst van reprotoxische stoffen –	<ul> <li>3-Cyclohexene-1-carboxaldehyde, 2,4-dimethyl-,Paraffin waxes and Hydrocarbon waxes,Petrolatum,Hydrogenated soybean oil,Slack wax, petroleum are listed</li> <li>None of the components are listed</li> <li>None of the components are listed</li> </ul>
Vruchtbaarheid	
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: None of the components are listed
Denmark	
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 additional information available

#### **SECTION 16: Other information**

Abbreviations and acronyms		
ACGIH	American Conference of Government Industrial Hygienists	
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	
CAS-No.	Chemical Abstract Service number	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
EC-No.	European Community number	
ED	Endocrine disrupting properties	
EN	European Standard	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LD50	Median lethal dose	
OEL	Occupational Exposure Limit	
OSHA	Occupational Safety and Health Administration	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STOT	Specific target organ toxicity	
TRGS	Technical Rules for Hazardous Substances	
vPvB	Very Persistent and Very Bioaccumulative	
WGK	Water Hazard Class	

#### Safety Data Sheet

612-656-1175

paceSDS@pacelabs.com

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

Data sources	: Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Classification for the USA in accordance with 29 CFR 1910.1200 (2012). Classification for the EU in accordance with 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. ECHA (European Chemicals Agency).
Training advice	: Normal use of this product shall imply use in accordance with the instructions for use and corresponding product packaging.
Indication of changes: Revision 1.0: New SDS Created.	
Other information	: Author: JAD.
SDS Prepared for Illume by: Pace Analytical Services, Inc. Product Regulatory Services Group 1800 Elm Street Minneapolis, MN 55414 United States	

#### Full text of H- and EUH-statements 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 Serious eye damage/eye irritation, Category 2 Eye Irrit. 2 Flam. Liq. 3 Flammable liquids, Category 3 Skin Irrit. 2 Skin corrosion/irritation, Category 2 Skin Sens. 1 Skin sensitisation, Category 1 Skin Sens. 1A Skin sensitisation, category 1A Skin Sens. 1B Skin sensitisation, category 1B STOT RE 2 Specific target organ toxicity - Repeated exposure, Category 2 H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. Causes skin irritation. H315 H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure. 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.

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Full text of H- and EUH-statements			
H412	Harmful to aquatic life with long lasting effects.		
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]			
Skin Sens. 1	H317	Concentration limits	
Aquatic Chronic 3	H412	Calculation method	

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.