

# Safety Data Sheet

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

Issue date: 9/18/2024

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

#### 1.1. Product identifier

Product form : Mixture

: SPICED APPLE TODDY FR90098 Trade name

Product code : FR90098

Type of product : Perfumes, fragrances Product group : Trade product

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

#### 1.2.1. Relevant identified uses

: Professional use Industrial use Main use category

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

Hyggeland Company Russian Federation

Krasnodar Stasova 184, 7

Phone.: +7 (953) 073-39-63

info@hyggeland.ru https://hyggeland.ru/

### 1.4. Emergency telephone number

**Emergency number** : 1-800-255-3924; +01-813-248-0585; China:+400-120-0751; Mexico:+01-800-099-0731;

Brazil: +0-800-591-6042; India: +000-800-100-4086

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2 H319 H317 Skin sensitisation, Category 1 Hazardous to the aquatic environment - Chronic Hazard, H411

Category 2

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

#### Adverse physicochemical, human health and environmental effects

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

#### 2.2. Label elements

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

Hazard pictograms (CLP)



GHS07 GHS09

Signal word (CLP) : Warning

# Safety Data Sheet

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

Contains : Cinnamic aldehyde; COUMARIN; Triplal (Vertocitral); Clove Leaf Oil

Hazard statements (CLP) : H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction. H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

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 %

### **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]
Cinnamic aldehyde	CAS-No.: 104-55-2 EC-No.: 203-213-9 EC Index-No.: 606-155-00-6 REACH-no: 01-2119935242- 45	14.7 – 29.425	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Aquatic Chronic 3, H412
Verdox	CAS-No.: 88-41-5 EC-No.: 201-828-7 REACH-no: 01-2119970713- 33	13.8 – 27.5	Aquatic Chronic 2, H411
benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371- 33	3.3 – 6.5	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Diethyl malonate	CAS-No.: 105-53-3 EC-No.: 203-305-9 REACH-no: 01-2119886972- 18	2.8 – 5.5	Eye Irrit. 2, H319
Phenylpropyl alcohol	CAS-No.: 122-97-4 EC-No.: 204-587-6	1.7 – 3.3	Skin Irrit. 2, H315 Eye Irrit. 2, H319
COUMARIN	CAS-No.: 91-64-5 EC-No.: 202-086-7 REACH-no: 01-2119943756- 26	1.7 – 3.3	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317

# Safety Data Sheet

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

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Vanillin	CAS-No.: 121-33-5 EC-No.: 204-465-2 REACH-no: 01-2119516040- 60	0.8 – 1.65	Eye Irrit. 2, H319
Verdyl acetate	CAS-No.: 5413-60-5 EC-No.: 226-501-6	0.6 – 1.1	Aquatic Chronic 3, H412
Triplal (Vertocitral)	CAS-No.: 68039-49-6 EC-No.: 268-264-1	0.6 – 1.1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Clove Leaf Oil	CAS-No.: 8000-34-8 EC-No.: 616-772-2	0.6 – 1.1	Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304
Allyl heptanoate	CAS-No.: 142-19-8 EC-No.: 205-527-1 REACH-no: 01-2119488961- 23	0.3 – 0.66	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 3, H412
Allyl caproate	CAS-No.: 123-68-2 EC-No.: 204-642-4 REACH-no: 01-2119983573- 26	0.2 – 0.44	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
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-	0.2 – 0.33	Acute Tox. 4 (Oral), H302
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7 REACH-no: 01-2119638272- 42	0.2 – 0.33	Aquatic Chronic 3, H412
isopentyl acetate substance with national workplace exposure limit(s) (AT, BE, BG, CY, DE, DK, EE, ES, FI, FR, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 123-92-2 EC-No.: 204-662-3 EC Index-No.: 607-130-00-2 REACH-no: 01-2119548408- 32	0.2 – 0.33	Flam. Liq. 3, H226
Aldehyde C-6 substance with national workplace exposure limit(s) (FI, PL)	CAS-No.: 66-25-1 EC-No.: 200-624-5	0 – 0.088	Flam. Liq. 3, H226

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

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

# Safety Data Sheet

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

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

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

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

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

Remove affected clothing and wash all exposed skin area with mild soap and water.

: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Get medical advice/attention. on this label). If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. Take off contaminated

clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. Rinse cautiously with water for several minutes. Remove contact lenses, if present

persists. Rinse cautiously with water for several minutes. Remove contact lenses, if prese and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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

center or a doctor if you feel unwell.

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

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

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

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

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

## 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes.

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

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

9/18/2024 (Issue date) EN (English) 4/22

### Safety Data Sheet

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

#### 6.2. Environmental precautions

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

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or

diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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

#### 6.4. Reference to other sections

See Section 8. Exposure controls and personal protection. For further information refer to section 13.

# **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wash hands and other exposed areas with mild

soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapours/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be

allowed out of the workplace. Do not eat, drink or smoke when using this product. Always

wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep

container closed when not in use. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 25 °C

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Store in a closed container.

Packaging materials : Do not store in corrodable metal.

Germany

Storage class (LGK, TRGS 510) : LGK 10 - 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 2A, LGK 5.1A, LGK 6.2, LGK 7

Joint storage with restrictions permitted for : LGK 4.1A, LGK 4.2, LGK 4.3, LGK 5.1B, LGK 5.1C, LGK 5.2

Joint storage permitted for : LGK 2B, LGK 3, LGK 4.1B, 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

9/18/2024 (Issue date) EN (English) 5/22

# Safety Data Sheet

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

# 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		
	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		
Benzyl acetate (140-11-4)	Benzyl acetate (140-11-4)		
Belgium - Occupational Exposure Limits			
Belgium - Occupational Exposure Limits			
Belgium - Occupational Exposure Limits OEL TWA	62 mg/m³		
	62 mg/m³ 10 ppm		
OEL TWA			
OEL TWA  Denmark - Occupational Exposure Limits	10 ppm		
OEL TWA  Denmark - Occupational Exposure Limits	10 ppm  61 mg/m³		
OEL TWA  Denmark - Occupational Exposure Limits  OEL TWA	10 ppm  61 mg/m³  10 ppm		
OEL TWA  Denmark - Occupational Exposure Limits  OEL TWA	10 ppm  61 mg/m³  10 ppm  122 mg/m³		
OEL TWA  Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL	10 ppm  61 mg/m³  10 ppm  122 mg/m³		
OEL TWA  Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm		
Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits  OEL TWA	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm  10 ppm		
Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits  OEL TWA  OEL STEL	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm  10 ppm		
Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits  OEL TWA  OEL STEL  Latvia - Occupational Exposure Limits	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm  10 ppm  30 ppm (calculated)		
Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits  OEL TWA  OEL STEL  Latvia - Occupational Exposure Limits  OEL TWA	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm  10 ppm  30 ppm (calculated)		
Denmark - Occupational Exposure Limits  OEL TWA  OEL STEL  Ireland - Occupational Exposure Limits  OEL TWA  OEL STEL  Latvia - Occupational Exposure Limits  OEL TWA  Lithuania - Occupational Exposure Limits	10 ppm  61 mg/m³  10 ppm  122 mg/m³  20 ppm  10 ppm  30 ppm (calculated)		

# Safety Data Sheet

GEL chemical category         A4 - Not Classifiable as a Human Carcinogen           Romania - Occupational Exposure Limits         50 mg/m²           GEL TWA         50 mg/m²           8 ppm         80 mg/m²           13 ppm         50 mg/m²           Spain - Occupational Exposure Limits           VI.A-ED (OEL TWA)         62 mg/m²           10 ppm         40 ppm           ACGIH Occupational Exposure Limits           VI.A-ED (OEL TWA)         10 ppm           ACGIH Occupational Exposure Limits (IOEL)           IOEL TWA         270 mg/m²           50 ppm           IOEL TWA         270 mg/m²           IOEL STEL         540 mg/m²           IOEL TWA         270 mg/m² (Pentyl acetate (all isomers))           MAK (OEL TWA)         270 mg/m² (Pentyl acetate (all isomers))           MAK (OEL STEL)         540 mg/m² (Pentyl acetate)           Belgium - Occupational Exposure Limits           OEL TWA         270 mg/m²           Del Dem           Del Dem           Del Dem           Del TWA         270 mg/m²           Del De	Benzyl acetate (140-11-4)		
DEL TWA   So mg/m²	OEL chemical category	A4 - Not Classifiable as a Human Carcinogen	
S ppm	Romania - Occupational Exposure Limits		
Spain - Occupational Exposure Limits	OEL TWA	50 mg/m³	
Tappm   Tapp		8 ppm	
Spain - Occupational Exposure Limits	OEL STEL	80 mg/m³	
VLA-ED (OEL TWA)         62 mg/m³           USA-ACGIH - Occupational Exposure Limits         10 ppm           ACGIH OEL TWA         10 ppm           ACGIH Chemical category         Not Classifiable as a Human Carcinogen           Isopentyl acetate (123-92-2)         EU - Indicative Occupational Exposure Limit (IOEL)           IOEL TWA         270 mg/m³           50 ppm         100 ppm           Austria - Occupational Exposure Limits         540 mg/m³           MAK (OEL TWA)         270 mg/m³ (Pentyl acetate (all isomers))           MAK (OEL STEL)         540 mg/m³ (Pentyl acetate)           Belgium - Occupational Exposure Limits         50 ppm (Pentylacetate)           Belgium - Occupational Exposure Limits         50 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           50 ppm         50 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           50 ppm         50 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OCCustata - Occupational Exposu		13 ppm	
USA - ACGIH - Occupational Exposure Limits  ACGIH Ober TWA ACGIH chemical category Isopentyl acetate (123-92-2)  EU - Indicative Occupational Exposure Limit (IOEL)  IOEL TWA  ASSIMATION TO Promotional Exposure Limit (IOEL)  IOEL STEL  ACGIN - Occupational Exposure Limit (IOEL)  MAK (OEL TWA)  Belgium - Occupational Exposure Limits  Belgium - Occupational Exposure Limits  OEL TWA  AUSTRIA - Occupational Exposure Limits  Belgium - Occupational Exposure Limits  OEL TWA  AUSTRIA - Occupational Exposure Limits  OEL TWA  Belgium - Occupational Exposure Limits  OEL TWA  AUSTRIA - OCCUPATIONA  AUSTRIA - OCC	Spain - Occupational Exposure Limits		
USA - ACGIH - Occupational Exposure Limits  ACGIH OEL TWA 10 ppm  ACGIH chemical category Not Classifiable as a Human Carcinogen  Isopentyl acetate (123-92-2)  EU - Indicative Occupational Exposure Limit (IOEL)  IOEL TWA 20 ppm  IOEL STEL 340 mg/m³ 100 ppm  Austria - Occupational Exposure Limits  MAK (OEL TWA) 270 mg/m³ (Pentyl acetate (all isomers))  MAK (OEL STEL) 340 mg/m³ (Pentyl acetate (all isomers))  MAK (OEL STEL) 400 mg/m³ (Pentyl acetate (all isomers))  MAK (OEL STEL) 540 mg/m³ (Pentyl acetate)  Belgium - Occupational Exposure Limits  OEL TWA 270 mg/m³ (Pentyl acetate)  Bulgaria - Occupational Exposure Limits  OEL TWA 270 mg/m³ (Do ppm  OEL STEL 340 mg/m³ (Do ppm  Croatia - Occupational Exposure Limits  GVI (OEL TWA) 270 mg/m³ (So ppm  KGVI (OEL STEL) 340 mg/m³ (So ppm  KGVI (OEL STEL) 340 mg/m³ (So ppm	VLA-ED (OEL TWA)	62 mg/m³	
ACGIH OEL TWA ACGIH chemical category Not Classifiable as a Human Carcinogen    Isopentyl acetate (123-92-2)		10 ppm	
ACGIH chemical category  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) 100 ppm (Pentylacetate) 100 ppm (	USA - ACGIH - Occupational Exposure Limits		
EU - Indicative Occupational Exposure Limit (IOEL)   IOEL TWA	ACGIH OEL TWA	10 ppm	
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))         50 ppm (Pentyl acetate)           Belgium - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm         540 mg/m³           100 ppm         9mm           Bulgaria - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm         540 mg/m³           50 ppm         540 mg/m³           Cocupational Exposure Limits         540 mg/m³           Croatia - Occupational Exposure Limits         540 mg/m³           GVI (OEL TWA)         270 mg/m³           50 ppm         50 ppm           KGVI (OEL STEL)         540 mg/m³           50 ppm         50 ppm	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
IOEL TWA         270 mg/m³           50 ppm         50 ppm           IOEL STEL         540 mg/m³           Austria - Occupational Exposure Limits         270 mg/m² (Pentyl acetate (all isomers))           MAK (OEL TWA)         270 mg/m² (Pentyl acetate (all isomers))           MAK (OEL STEL)         540 mg/m² (Pentylacetate)           Belgium - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           OEL STEL         540 mg/m²           Bulgaria - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           OEL TWA         270 mg/m²           OEL TWA         50 ppm           OEL STEL         540 mg/m²           100 ppm         Croatia - Occupational Exposure Limits           Croatia - Occupational Exposure Limits         270 mg/m²           GVI (OEL TWA)         270 mg/m²           50 ppm         50 ppm           KGVI (OEL STEL)         540 mg/m²	isopentyl acetate (123-92-2)		
S0 ppm	EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL STEL         540 mg/m³           Austria - Occupational Exposure Limits         270 mg/m³ (Pentyl acetate (all isomers))           MAK (OEL TWA)         50 ppm (Pentyl acetate (all isomers))           MAK (OEL STEL)         540 mg/m³ (Pentylacetate)           Belgium - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           OEL STEL         540 mg/m³           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           OFL STEL         540 mg/m³           Croatia - Occupational Exposure Limits         270 mg/m³           GVI (OEL TWA)         270 mg/m³           50 ppm         50 ppm           KGVI (OEL STEL)         540 mg/m³	IOEL TWA	270 mg/m³	
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)  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  CEL TWA  270 mg/m³  50 ppm  OEL STEL  540 mg/m³  50 ppm  Croatia - Occupational Exposure Limits  CFORMIA - Occupational Exposure Limits  STO mg/m³  50 ppm  CROATIA - Occupational Exposure Limits  GVI (OEL TWA)  540 mg/m³  50 ppm  KGVI (OEL STEL)  540 mg/m³  50 ppm		50 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)           Belgium - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           0EL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           0EL TWA         270 mg/m³           Coppm         540 mg/m³           Too ppm         50 ppm           Croatia - Occupational Exposure Limits         270 mg/m³           GVI (OEL TWA)         270 mg/m³           50 ppm         50 ppm           KGVI (OEL STEL)         540 mg/m³	IOEL STEL	540 mg/m³	
MAK (OEL TWA)       270 mg/m³ (Pentyl acetate (all isomers))         50 ppm (Pentyl acetate (all isomers))         MAK (OEL STEL)       540 mg/m³ (Pentylacetate)         Belgium - Occupational Exposure Limits         OEL TWA       270 mg/m³         50 ppm         OEL STEL       540 mg/m³         Bulgaria - Occupational Exposure Limits         OEL TWA       270 mg/m³         50 ppm         OEL STEL       540 mg/m³         OEL STEL       540 mg/m³         OEL STEL       540 mg/m³         OEL STEL       540 mg/m³         Croatia - Occupational Exposure Limits       Croatia - Occupational Exposure Limits         GVI (OEL TWA)       270 mg/m³         50 ppm       540 mg/m³         KGVI (OEL STEL)       540 mg/m³		100 ppm	
S0 ppm (Pentyl acetate (all isomers))   MAK (OEL STEL)   540 mg/m³ (Pentylacetate)     100 ppm (Pentylacetate)     100 ppm (Pentylacetate)     100 ppm (Pentylacetate)     270 mg/m³     50 ppm     OEL STEL	Austria - Occupational Exposure Limits		
MAK (OEL STEL)         540 mg/m³ (Pentylacetate)           Belgium - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           OEL STEL         540 mg/m³           Croatia - Occupational Exposure Limits         270 mg/m³           GVI (OEL TWA)         270 mg/m³           KGVI (OEL STEL)         540 mg/m³	MAK (OEL TWA)	270 mg/m³ (Pentyl acetate (all isomers))	
100 ppm (Pentylacetate)		50 ppm (Pentyl acetate (all isomers))	
Belgium - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm         540 mg/m³           0EL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm           OEL STEL         540 mg/m³           100 ppm           Croatia - Occupational Exposure Limits           GVI (OEL TWA)         270 mg/m³           50 ppm           KGVI (OEL STEL)         540 mg/m³	MAK (OEL STEL)	540 mg/m³ (Pentylacetate)	
OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits         100 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           100 ppm         Croatia - Occupational Exposure Limits           GVI (OEL TWA)         270 mg/m³           50 ppm         540 mg/m³           KGVI (OEL STEL)         540 mg/m³		100 ppm (Pentylacetate)	
S0 ppm   S0 ppm   S40 mg/m³	Belgium - Occupational Exposure Limits		
OEL STEL         540 mg/m³           Bulgaria - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           OEL STEL         540 mg/m³           Croatia - Occupational Exposure Limits         270 mg/m³           GVI (OEL TWA)         270 mg/m³           KGVI (OEL STEL)         540 mg/m³	OEL TWA	270 mg/m³	
100 ppm		50 ppm	
Bulgaria - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm         540 mg/m³           0EL STEL         540 mg/m³           100 ppm         Croatia - Occupational Exposure Limits           GVI (OEL TWA)         270 mg/m³           50 ppm         KGVI (OEL STEL)           KGVI (OEL STEL)         540 mg/m³	OEL STEL	540 mg/m³	
OEL TWA       270 mg/m³         50 ppm         OEL STEL       540 mg/m³         100 ppm         Croatia - Occupational Exposure Limits         GVI (OEL TWA)       270 mg/m³         50 ppm         KGVI (OEL STEL)       540 mg/m³		100 ppm	
So ppm   S	Bulgaria - Occupational Exposure Limits		
OEL STEL         540 mg/m³           100 ppm           Croatia - Occupational Exposure Limits           GVI (OEL TWA)         270 mg/m³           50 ppm           KGVI (OEL STEL)         540 mg/m³	OEL TWA	270 mg/m³	
100 ppm		50 ppm	
Croatia - Occupational Exposure Limits           GVI (OEL TWA)         270 mg/m³           50 ppm           KGVI (OEL STEL)         540 mg/m³	OEL STEL	540 mg/m³	
GVI (OEL TWA)  270 mg/m³  50 ppm  KGVI (OEL STEL)  540 mg/m³		100 ppm	
50 ppm  KGVI (OEL STEL)  540 mg/m³	Croatia - Occupational Exposure Limits		
KGVI (OEL STEL) 540 mg/m³	GVI (OEL TWA)	270 mg/m³	
		50 ppm	
100 ppm	KGVI (OEL STEL)	540 mg/m³	
		100 ppm	

# Safety Data Sheet

Cyprus - Occupational Exposure Limits           OEL TYMA         270 mg/m²           OEL STEL         540 mg/m²           Denmark - Occupational Exposure Limits         721 mg/m² (Amyl acetate, all isomers)           OEL TWA         271 mg/m² (Amyl acetate, all isomers)           OEL STEL         540 mg/m²           DEL TWA         270 mg/m²           DEL TWA         270 mg/m²           OEL TWA         270 mg/m²           OEL STEL         540 mg/m²           OEL STEL         540 mg/m²           OEL STEL         540 mg/m²           Finland - Occupational Exposure Limits         The Occupational Exposure Limits           FINITED STELL         540 mg/m² (Pentyl acetate)           FORM Prince - Occupational Exposure Limits         The Opm (restrictive limit)           France - Occupational Exposure Limits         270 mg/m² (restrictive limit)           VIE (OEL CYSTEL)         540 mg/m² (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 90)         AGW (OEL TWA)           Gibrattar - Occupational Exposure Limits         50 ppm           Gibrattar - Occupational Exposure Limits         50 ppm           OEL TWA         50 ppm           OEL STEL         640 mg/m²           100 ppm         100 ppm	isopentyl acetate (123-92-2)		
S0 ppm	Cyprus - Occupational Exposure Limits		
Denmark - Occupational Exposure Limits	OEL TWA	270 mg/m³	
100 ppm		50 ppm	
Denmark - Occupational Exposure Limits	OEL STEL	540 mg/m³	
OEL TWA         271 mg/m² (Amyl acetate, all isomers)           50 ppm (Amyl acetate, all isomers)           OEL STEL         540 mg/m²           100 ppm           Estonia - Occupational Exposure Limits         270 mg/m²           OEL TWA         50 ppm           OEL STEL         540 mg/m²           100 ppm         100 ppm           Finland - Occupational Exposure Limits         270 mg/m² (Pentyl acetate)           HTP (OEL TWA)         50 ppm (Pentyl acetate)           HTP (OEL STEL)         540 mg/m²           100 ppm         100 ppm           France - Occupational Exposure Limits         270 mg/m² (restrictive limit)           VLE (OEL C/STEL)         50 ppm (restrictive limit)           VLE (OEL C/STEL)         540 mg/m² (restrictive limit)           VLE (OEL TWA)         270 mg/m² (restrictive limit)           VLE (OEL TWA)         270 mg/m² (restrictive limit)           OEP pm         50 ppm           Gibraltar - Occupational Exposure Limits         270 mg/m² (restrictive limit)           OEL TWA         270 mg/m² (restrictive limit)           OEL TWA         50 ppm           OEL TWA         50 ppm           OEL TWA         60 ppm           OEL TWA         <		100 ppm	
S0 ppm (Anyl acetate, all isomers)	Denmark - Occupational Exposure Limits		
OEL STEL         540 mg/m²           100 ppm           Estonia - Occupational Exposure Limits           OEL TWA         270 mg/m²           50 ppm         50 ppm           Finland - Occupational Exposure Limits           HTP (OEL TWA)         270 mg/m² (Pentyl acetate)           50 ppm (Pentyl acetate)         50 ppm (Pentyl acetate)           HTP (OEL STEL)         540 mg/m²           60 ppm         700 ppm           France - Occupational Exposure Limits           VME (OEL TWA)         270 mg/m² (restrictive limit)           50 ppm (restrictive limit)         50 ppm (restrictive limit)           VLE (OEL C/STEL)         540 mg/m² (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900)           ASW (OEL TWA)         270 mg/m²           50 ppm         50 ppm           Gibraltar - Occupational Exposure Limits           OEL TWA         270 mg/m²           50 ppm         50 ppm           Greece - Occupational Exposure Limits           OEL TWA         530 mg/m²           OEL TWA         530 mg/m²           OEL TWA         530 mg/m²	OEL TWA	271 mg/m³ (Amyl acetate, all isomers)	
Toppm		50 ppm (Amyl acetate, all isomers)	
Estonia - Occupational Exposure Limits	OEL STEL	540 mg/m³	
OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           100 ppm         100 ppm           Finland - Occupational Exposure Limits         270 mg/m³ (Pentyl acetate)           HTP (OEL TWA)         270 mg/m³ (Pentyl acetate)           HTP (OEL STEL)         540 mg/m³           France - Occupational Exposure Limits         270 mg/m³ (restrictive limit)           50 ppm (restrictive limit)         50 ppm (restrictive limit)           VLE (OEL C/STEL)         540 mg/m³ (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900-)         AGW (OEL TWA)           Germany - Occupational Exposure Limits         270 mg/m³           50 ppm         50 ppm           Gibraltar - Occupational Exposure Limits         270 mg/m³           50 ppm         50 ppm           GEL TWA         270 mg/m³           50 ppm         50 ppm           Gerece - Occupational Exposure Limits         540 mg/m³           100 ppm         100 ppm           Greece - Occupational Exposure Limits         800 mg/m³           OEL TWA         800 mg/m³           0EL TWA         800 mg/m³		100 ppm	
S0 ppm   S40 mg/m³   100 ppm   S40 mg/m³   100 ppm   S40 mg/m³   100 ppm   S40 mg/m³   100 ppm   S40 mg/m³   S40	Estonia - Occupational Exposure Limits		
OEL STEL         540 mg/m³           Finland - Occupational Exposure Limits         270 mg/m³ (Pentyl acetate)           HTP (OEL TWA)         270 mg/m³ (Pentyl acetate)           HTP (OEL STEL)         540 mg/m³           100 ppm         100 ppm           France - Occupational Exposure Limits         270 mg/m³ (restrictive limit)           VME (OEL TWA)         270 mg/m³ (restrictive limit)           VLE (OEL C/STEL)         540 mg/m³ (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900)           AGW (OEL TWA)         270 mg/m³           50 ppm           Gibraltar - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm           OEL 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 TWA         530 mg/m³           100 ppm           OEL TWA         800 mg/m³	OEL TWA	270 mg/m³	
100 ppm		50 ppm	
Finland - Occupational Exposure Limits           HTP (OEL TWA)         270 mg/m³ (Pentyl acetate)           50 ppm (Pentyl acetate)         50 ppm (Pentyl acetate)           HTP (OEL STEL)         540 mg/m³           100 ppm         700 ppm           France - Occupational Exposure Limits         270 mg/m³ (restrictive limit)         700 ppm (restrictive limit)           VLE (OEL C/STEL)         540 mg/m³ (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900)         700 mg/m³           AGW (OEL TWA)         270 mg/m³           Gibraltar - Occupational Exposure Limits         270 mg/m³           G0 ppm         700 ppm           OEL TWA         540 mg/m³           G0 ppm         700 ppm           Greece - Occupational Exposure Limits         630 mg/m³           OEL TWA         630 mg/m³           100 ppm         600 mg/m³           OEL STEL         800 mg/m³	OEL STEL	540 mg/m³	
HTP (OEL TWA)  270 mg/m³ (Pentyl acetate)  HTP (OEL STEL)  540 mg/m³  100 ppm  France - Occupational Exposure Limits  VME (OEL TWA)  270 mg/m³ (restrictive limit)  50 ppm (restrictive limit)  VLE (OEL C/STEL)  540 mg/m³ (restrictive limit)  100 ppm (restrictive limit)  Germany - Occupational Exposure Limits (TRGS 900)  AGW (OEL TWA)  270 mg/m³  50 ppm  Gibraltar - Occupational Exposure Limits  OEL TWA  270 mg/m³  50 ppm  OEL STEL  540 mg/m³  100 ppm  Greece - Occupational Exposure Limits  OEL TWA  630 mg/m³  100 ppm  Greece - Occupational Exposure Limits  OEL TWA  630 mg/m³  100 ppm  Greece - Occupational Exposure Limits  OEL TWA  630 mg/m³  100 ppm  OEL STEL  640 mg/m³  630 mg/m³  100 ppm		100 ppm	
S0 ppm (Pentyl acetate)   HTP (OEL STEL)	Finland - Occupational Exposure Limits		
HTP (OEL STEL)  540 mg/m³ 100 ppm  France - Occupational Exposure Limits  VME (OEL TWA)  270 mg/m³ (restrictive limit)  50 ppm (restrictive limit)  100 ppm (restrictive limit)  640 mg/m³ (restrictive limit)  700 ppm (restrictive limit)  640 mg/m³ (	HTP (OEL TWA)	270 mg/m³ (Pentyl acetate)	
France - Occupational Exposure Limits  VME (OEL TWA)  270 mg/m³ (restrictive limit) 50 ppm (restrictive limit) 100 ppm (restrictive limit) 100 ppm (restrictive limit) 100 ppm (restrictive limit)  Germany - Occupational Exposure Limits (TRGS 900)  AGW (OEL TWA)  270 mg/m³ 50 ppm  Gibraltar - Occupational Exposure Limits  OEL TWA  270 mg/m³ 50 ppm  OEL STEL  540 mg/m³ 100 ppm  Greece - Occupational Exposure Limits  OEL TWA  530 mg/m³ 100 ppm  OEL STEL  800 mg/m³  100 ppm		50 ppm (Pentyl acetate)	
France - Occupational Exposure Limits  VME (OEL TWA)  270 mg/m³ (restrictive limit)  50 ppm (restrictive limit)  VLE (OEL C/STEL)  540 mg/m³ (restrictive limit)  100 ppm (restrictive limit)  Germany - Occupational Exposure Limits (TRGS 900)  AGW (OEL TWA)  270 mg/m³  50 ppm  Gibraltar - Occupational Exposure Limits  OEL TWA  270 mg/m³  50 ppm  OEL STEL  540 mg/m³  100 ppm  Greece - Occupational Exposure Limits  OEL TWA  530 mg/m³  100 ppm  OEL STEL  800 mg/m³  100 ppm	HTP (OEL STEL)	540 mg/m³	
VME (OEL TWA)         270 mg/m³ (restrictive limit)           VLE (OEL C/STEL)         540 mg/m³ (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900)         270 mg/m³           AGW (OEL TWA)         270 mg/m³           Gibraltar - Occupational Exposure Limits         270 mg/m³           Gibraltar - Occupational Exposure Limits         270 mg/m³           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           Greece - Occupational Exposure Limits         530 mg/m³           OEL TWA         530 mg/m³           100 ppm         0EL STEL		100 ppm	
S0 ppm (restrictive limit)	France - Occupational Exposure Limits		
VLE (OEL C/STEL)         540 mg/m³ (restrictive limit)           100 ppm (restrictive limit)         100 ppm (restrictive limit)           Germany - Occupational Exposure Limits (TRGS 900)           AGW (OEL TWA)         270 mg/m³           50 ppm         50 ppm           OEL TWA         270 mg/m³           50 ppm         50 ppm           OEL STEL         540 mg/m³           Greece - Occupational Exposure Limits         530 mg/m³           OEL TWA         530 mg/m³           100 ppm         00 ppm	VME (OEL TWA)	270 mg/m³ (restrictive limit)	
100 ppm (restrictive limit)		50 ppm (restrictive limit)	
Germany - Occupational Exposure Limits (TRGS 900)           AGW (OEL TWA)         270 mg/m³           50 ppm           Gibraltar - Occupational Exposure Limits           OEL TWA         270 mg/m³           50 ppm           OEL STEL         540 mg/m³           Greece - Occupational Exposure Limits           OEL TWA         530 mg/m³           100 ppm           OEL STEL         800 mg/m³	VLE (OEL C/STEL)	540 mg/m³ (restrictive limit)	
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		100 ppm (restrictive limit)	
50 ppm	Germany - Occupational Exposure Limits (TRGS 90	00)	
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	AGW (OEL TWA)	270 mg/m³	
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		50 ppm	
50 ppm     50 ppm	Gibraltar - Occupational Exposure Limits		
OEL STEL         540 mg/m³           100 ppm           Greece - Occupational Exposure Limits           OEL TWA         530 mg/m³           100 ppm           OEL STEL         800 mg/m³	OEL TWA	270 mg/m³	
100 ppm		50 ppm	
Greece - Occupational Exposure Limits           OEL TWA         530 mg/m³           100 ppm         800 mg/m³	OEL STEL	540 mg/m³	
OEL TWA     530 mg/m³       100 ppm       OEL STEL     800 mg/m³		100 ppm	
0EL STEL 800 mg/m³	Greece - Occupational Exposure Limits		
OEL STEL 800 mg/m³	OEL TWA	530 mg/m³	
-		100 ppm	
150 ppm	OEL STEL	800 mg/m³	
		150 ppm	

# Safety Data Sheet

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)

# Safety Data Sheet

OEL STEL         \$0 ppm (indicative limit value) (indicative limit value)           Romania - Occupational Exposure Limits           OEL STEL         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         70 mg/m²           Slovakia - Occupational Exposure Limits         270 mg/m²           NPHV (OEL TWA)         270 mg/m²           Slovania - Occupational Exposure Limits         270 mg/m²           OEL STEL         50 ppm           OEL STEL         60 mg/m²           100 ppm         9pm           Spain - Occupational Exposure Limits         270 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         240 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         40 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         270 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         40 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         270 mg	isopentyl acetate (123-92-2)		
Romania - Occupational Exposure Limits           OEL TWA         270 mg/m³           OEL STEL         540 mg/m³           OEL STEL         540 mg/m³           OEL STEL         540 mg/m³           Slovakia - Occupational Exposure Limits         270 mg/m³           NPHV (OEL TWA)         50 ppm           Slovenia - Occupational Exposure Limits         270 mg/m³           Slovenia - Occupational Exposure Limits         270 mg/m³           OEL TWA         50 ppm           OEL STEL         640 mg/m³           50 ppm         640 mg/m³           Popm         640 mg/m³           Popm         70 mg/m³           Spain - Occupational Exposure Limits         70 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         50 ppm (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m³ (indicative limit value)           Switzer TWA         270 mg/m³ (indicative limit value)		50 ppm (indicative limit value (Pentyl acetate, all isomers)	
Romania - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           50 ppm         500 ppm           SIOvakia - Occupational Exposure Limits         270 mg/m²           NPHY (OEL TWA)         270 mg/m²           SIOvania - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           50 ppm         50 ppm           OEL TWA         270 mg/m²           50 ppm         60 ppm           OEL STEL         50 ppm           OEL TWA         270 mg/m²           50 ppm         60 ppm           Spain - Occupational Exposure Limits         700 ppm           Sylam - Occupational Exposure Limits         700 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         500 ppm (indicative limit value)           VLA-EC (OEL STEL)         100 ppm           Sweten - Occupational Exposure Limits         700 mg/m² (indicative limit value)           Sweten - Occupational Exposure Limits         800 mg/m² (Pentyl acetates)           Koy (OEL TWA)         270 mg/m² (Pentyl acetates)           Koy (OEL STEL)         280 mg/m² (Pentyl acetates)           Norway - Occupational Exposure Limits         75 ppm (value calculated)           Kortidsverdi (OEL TWA)         280 mg/m² (Pent	OEL STEL	540 mg/m³ (indicative limit value)	
OEL TWA         270 mg/m²           OEL STEL         50 pm           OEL STEL         500 mg/m²           OEL STEL         540 mg/m²           Slovakia - Occupational Exposure Limits         270 mg/m²           NPHY (OEL CY)         540 mg/m²           Slovenia - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           50 ppm         50 ppm           OEL STEL         540 mg/m²           500 ppm         600 ppm           Spain - Occupational Exposure Limits           VLA-EO (OEL STEL)         540 mg/m²           50 ppm (indicative limit value)         50 ppm (indicative limit value)           VLA-EC (OEL STEL)         540 mg/m²           50 ppm (indicative limit value)         50 ppm (indicative limit value)           VLA-EC (OEL STEL)         540 mg/m²           Sweden - Occupational Exposure Limits           Novay - Occupational Exposure Limits      <		100 ppm (indicative limit value)	
OEL STEL         50 pm           OEL STEL         540 mg/m³           100 ppm           Stovakia - Occupational Exposure Limits           NPHY (OEL TWA)         270 mg/m³           50 ppm           NPHY (OEL C)         540 mg/m³           Slovenia - Occupational Exposure Limits         270 mg/m³           OEL TWA         540 mg/m³           540 mg/m³         100 ppm           Spain - Occupational Exposure Limits         270 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         50 ppm (indicative limit value)           VLA-ED (OEL STEL)         50 ppm (indicative limit value)           Swoden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           Swoden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           KGY (OEL STEL)         50 ppm (Pentyl acetates)           KGY (OEL STEL)         50 ppm (Pentyl acetates)           Korway - Occupational Exposure Limits         250 mg/m³ (Pentyl acetates)           Kortidasverdi (OEL TWA)         260 mg/m³ (Pentyl acetates)           So ppm (Pentyl acetates)         250 mg/m³ (Pentyl acetates)           Switzerland - Occupational Exposure Limits         250 mg/m³ (Pentyl acetate all isomers)      <	Romania - Occupational Exposure Limits		
DEL STEL         540 mg/m²           SIOVAKIA - Occupational Exposure Limits         270 mg/m²           NPHY (OEL TWA)         540 mg/m²           SIOVENIA - Occupational Exposure Limits         540 mg/m²           SIOVENIA - OCCUPATIONAL Exposure Limits         270 mg/m²           DEL TWA         270 mg/m²           Sp pm         50 pm           OEL STEL         540 mg/m²           100 pm         100 pm           Spain - Occupational Exposure Limits         270 mg/m² (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m² (indicative limit value)           VLA-ED (OEL STEL)         540 mg/m²           Sweden - Occupational Exposure Limits         270 mg/m² (Pentyl acetates)           SWY (OEL TWA)         270 mg/m² (Pentyl acetates)           Sy pm (Pentyl acetates)         100 ppm (Pentyl acetates)           KGY (OEL STEL)         50 pm (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m² (Pentyl acetates)           Kortiddsverdi (OEL TWA)         260 mg/m² (Pentyl acetates)           Sy pm         260 mg/m² (Pentyl acetates)           Sy pm (value calculated)         75 pm (value calculated)           Switzerland - Occupational Exposure Limits         250 mg/m² (Pentyl acetate all isomers)         250 mg/m² (Pentyl acetate all isomers)	OEL TWA	270 mg/m³	
Slovakia - Occupational Exposure Limits           NPHV (OEL TWA)         270 mg/m²           50 ppm         50 ppm           NPHV (OEL C)         50 ppm           Slovenia - Occupational Exposure Limits         270 mg/m²           OEL TWA         50 ppm           OEL STEL         540 mg/m²           50 ppm         100 ppm           Spain - Occupational Exposure Limits         270 mg/m² (indicative limit value)           50 ppm (indicative limit value)         50 ppm (midicative limit value)           70 ppm         50 ppm (indicative limit value)           80 mg/m²         100 ppm           80 mg/m²         100 ppm           80 mg/m²         100 ppm           80 mg/m²         100 ppm           80 mg/m² (Pentyl acetates)         100 ppm (Pentyl acetates)           80 mg/m² (Pentyl acetates)		50 ppm	
Slovakia - Occupational Exposure Limits         270 mg/m²           NPHV (OEL C)         540 mg/m²           Slovenia - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           55 ppm         55 ppm           OEL STEL         540 mg/m²           100 ppm         100 ppm           Spain - Occupational Exposure Limits         270 mg/m² (indicative limit value)           50 ppm (indicative limit value)         50 ppm (indicative limit value)           50 ppm (indicative limit value)         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         540 mg/m² (indicative limit value)           Sweden - Occupational Exposure Limits         50 ppm (Pentyl acetates)           KGY (OEL TWA)         270 mg/m² (Pentyl acetates)           50 ppm (Pentyl acetates)         50 ppm (Pentyl acetates)           KGY (OEL STEL)         40 mg/m² (Pentyl acetates)           Norway - Occupational Exposure Limits         50 ppm           Kortidsverdi (OEL TWA)         260 mg/m² (value calculated)           50 ppm         75 ppm (value calculated)           75 ppm (value calculated)         75 ppm (value calculated)           8 witzerland - Occupational Exposure Limits         50 ppm (Pentyl acetate all isomers)           KZGW (OEL STEL)	OEL STEL	540 mg/m³	
NPHV (OEL TWA)         270 mg/m²           NPHV (OEL C)         540 mg/m³           Slovenia - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m³           OEL STEL         270 mg/m³           50 mpm         50 mg/m³           100 ppm         59 mg/m³           Spain - Occupational Exposure Limits         270 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m³ (indicative limit value)           VLA-ED (OEL STEL)         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           Key (OEL STEL)         50 ppm (Pentyl acetates)           Key (OEL TWA)         50 ppm (Pentyl acetates)           Key (OEL STEL)         50 ppm (Pentyl acetates)           Norway - Occupational Exposure Limits         50 ppm (Pentyl acetates)           Kortidsverdi (OEL TWA)         280 mg/m³           50 ppm         50 ppm           Kortidsverdi (OEL STEL)         280 mg/m³ (value calculated)           7 ppm (value calculated)         7 ppm (value calculated)           Switzerland - Occupational Exposure Limits         50 ppm (Pentyl acetate all isomers)           KZGW (OEL STEL)         60 mg/m² (Pentyl acetate all isomers)           60 mg/m² (Pentyl acetate all isomers		100 ppm	
NPHV (OEL C)         50 ppm           Siovenia - Occupational Exposure Limits         270 mg/m²           OEL TWA         270 mg/m²           65 ppm         50 ppm           OEL STEL         50 ppm           5 ppm - Occupational Exposure Limits         270 mg/m² (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         270 mg/m² (Pentyl acetates)           KGY (OEL TWA)         270 mg/m² (Pentyl acetates)           KGY (OEL STEL)         50 ppm (Pentyl acetates)           KGY (OEL STEL)         60 mg/m² (Pentyl acetates)           Norway - Occupational Exposure Limits         70 ppm (Pentyl acetates)           Kortidsverdi (OEL TWA)         260 mg/m² (Value calculated)           50 ppm (value calculated)         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         75 ppm (Pentyl acetate all isomers)           Switzerland - Occupational Exposure Limits         75 ppm (Pentyl acet	Slovakia - Occupational Exposure Limits		
NPHV (OEL C)         \$40 mg/m³           Slovenia - Occupational Exposure Limits         270 mg/m³           0EL TWA         \$40 mg/m³           0EL STEL         \$40 mg/m³           100 ppm         100 ppm           Spain - Occupational Exposure Limits         270 mg/m³ (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m³ (indicative limit value)           VLA-EC (OEL STEL)         400 mg/m³           100 ppm         100 ppm           Sweden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           KGY (OEL TWA)         270 mg/m³ (Pentyl acetates)           KGY (OEL STEL)         \$40 mg/m³ (Pentyl acetates)           Morway - Occupational Exposure Limits         50 ppm (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m³ (Pentyl acetates)           Kortlideverdi (OEL STEL)         260 mg/m³ (value calculated)           50 ppm (value calculated)         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         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 (Pentyl acetate all isomers)         50 ppm (Pentyl acetate all isomers)	NPHV (OEL TWA)	270 mg/m³	
Slovenia - Occupational Exposure Limits           OEL TWA         270 mg/m²           50 ppm         50 ppm           OEL STEL         540 mg/m²           100 ppm         100 ppm           Spain - Occupational Exposure Limits         270 mg/m² (indicative limit value)           VLA-ED (OEL TWA)         270 mg/m² (indicative limit value)           VLA-EC (OEL STEL)         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         270 mg/m² (Pentyl acetates)           Norman (Pentyl acetates)         50 ppm (Pentyl acetates)           50 ppm (Pentyl acetates)         60 mg/m² (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m² (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m² (Pentyl acetates)           Kritidsverdi (OEL TWA)         260 mg/m² (value calculated)           75 ppm (value calculated)         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         260 mg/m² (Pentyl acetate all isomers)           KZGW (OEL STEL)         260 mg/m² (Pentyl acetate all isomers)           50 ppm (Pentyl acetate all isomers)         50 ppm (Pentyl acetate all isomers)		50 ppm	
QEL TWA         270 mg/m³           50 ppm         540 mg/m³           100 ppm         700 ppm           Spain - Occupational Exposure Limits         270 mg/m³ (indicative limit value)           50 ppm (indicative limit value)         50 ppm (indicative limit value)           VLA-EC (OEL STEL)         540 mg/m³           50 ppm (indicative limit value)         50 ppm (indicative limit value)           Sweden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           KOY (OEL TWA)         270 mg/m³ (Pentyl acetates)           50 ppm (Pentyl acetates)           50 ppm (Pentyl acetates)           Norway - Occupational Exposure Limits           Norway - Occupational Exposure Limits           Norway - Occupational Exposure Limits         260 mg/m³           For pm (Pentyl acetate)         325 mg/m³ (value calculated)           50 ppm         75 ppm (value calculated)           75 ppm (value calculated)         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         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)	NPHV (OEL C)	540 mg/m³	
So ppm	Slovenia - Occupational Exposure Limits		
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           Newdon - Occupational Exposure Limits         540 mg/m³           NEW (OEL TWA)         270 mg/m³ (Pentyl acetates)           SV (OEL TWA)         270 mg/m³ (Pentyl acetates)           KGY (OEL STEL)         540 mg/m³ (Pentyl acetates)           Norway - Occupational Exposure Limits         540 mg/m³ (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m³ (value calculated)           Kortidosverdi (OEL TWA)         260 mg/m³ (value calculated)           Switzerland - Occupational Exposure Limits         75 ppm (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)           KZGW (OEL STEL)         50 ppm (Pentyl acetate all isomers)           KZGW (OEL STEL)         50 ppm (Pentyl acetate all isomers)           SWILL - Occupational Exposure Limits         50 ppm (Pentyl acetate all isomers)	OEL TWA	270 mg/m³	
		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         Switzerland (OEL TWA)         260 mg/m³         50 ppm         Switzerland - Occupational Exposure Limits         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)         Typm (Pentyl acetate all isomers)       50 ppm (Pentyl acetate all isomers)         Typm (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           Sweden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           KGV (OEL TWA)         270 mg/m³ (Pentyl acetates)           KGV (OEL STEL)         540 mg/m³ (Pentyl acetates)           KGV (OEL STEL)         540 mg/m³ (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m³           Grenseverdi (OEL TWA)         260 mg/m³           50 ppm         50 ppm           Korttidsverdi (OEL STEL)         325 mg/m³ (value calculated)           75 ppm (value calculated)         75 ppm (value calculated)           Switzerland - Occupational Exposure Limits         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)           USA - ACGIH - Occupational Exposure Limits         260 mg/m³ (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)  250 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)	Spain - Occupational Exposure Limits		
VLA-EC (OEL STEL)         540 mg/m³ 100 ppm           Sweden - Occupational Exposure Limits         270 mg/m³ (Pentyl acetates)           KGV (OEL TWA)         270 mg/m³ (Pentyl acetates)           KGV (OEL STEL)         540 mg/m³ (Pentyl acetates)           Norway - Occupational Exposure Limits         260 mg/m³ (Pentyl acetates)           Korttidsverdi (OEL TWA)         260 mg/m³ (Value calculated)           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 (Pentyl acetate all isomers)           KZGW (OEL STEL)         260 mg/m³ (Pentyl acetate all isomers)           WAS - ACGIH - Occupational Exposure Limits	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)   100 ppm (Pentyl acetate all isomers)   100 ppm (Pentyl acetate all i		50 ppm (indicative limit value)	
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         Seenseverdi (OEL TWA)         260 mg/m³       260 mg/m³         50 ppm         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)         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	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  Fenseverdi (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) 50 ppm (Pentyl acetate all isomers) 50 ppm (Pentyl acetate all isomers)		100 ppm	
KGV (OEL STEL)  50 ppm (Pentyl acetates) 510 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) 100 ppm (Pentyl acetates) 100 ppm (Pentyl acetates)  Norway - Occupational Exposure Limits  Grenseverdi (OEL TWA)  600 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) 50 ppm (Pentyl acetate all isomers)	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)         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)         VSA - ACGIH - Occupational Exposure Limits       50 ppm (Pentyl acetate all isomers)	NGV (OEL TWA)	270 mg/m³ (Pentyl acetates)	
Norway - Occupational Exposure Limits  Grenseverdi (OEL TWA)  60 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)  50 ppm (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)  Events of the person of	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)  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		100 ppm (Pentyl acetates)	
Korttidsverdi (OEL STEL)  50 ppm  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)  50 ppm (Pentyl acetate all isomers)  USA - ACGIH - Occupational Exposure Limits	Grenseverdi (OEL TWA)	260 mg/m³	
T5 ppm (value calculated)		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)  60 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)	

# Safety Data Sheet

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

isopentyl acetate (123-92-2)	
ACGIH OEL STEL	100 ppm (Pentyl acetate, all isomers)
Aldehyde C-6 (66-25-1)	
Finland - Occupational Exposure Limits	
HTP (OEL STEL)	42 mg/m³
	10 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	40 mg/m³
NDSCh (OEL STEL)	80 mg/m³

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

# 8.2.2. Personal protection equipment

# Personal protective equipment:

Avoid all unnecessary exposure.

# Personal protective equipment symbol(s):





### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses. Safety glasses

#### 8.2.2.2. Skin protection

# Skin and body protection:

Wear suitable protective clothing

#### 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

### Safety Data Sheet

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

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

## **SECTION 9: Physical and chemical properties**

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

Physical state : Liquid

Colour : Conforms to standard.

Odour : characteristic. Odour threshold : Not available Melting point : Not applicable : Not available Freezing point : Not available Boiling point Flammability : Not applicable Lower explosion limit : Not available : Not available Upper explosion limit : 66 °C Flash point : Not available Auto-ignition temperature Decomposition temperature : Not available рΗ Not available Viscosity, kinematic : Not available

Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available

Vapour pressure : 0.027343695 mm Hg (calculated value)

Vapour pressure at 50°C : Not available
Density : Not available
Relative density : Not available
Relative vapour density at 20°C : Not available
Particle characteristics : Not applicable

#### 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : 18.953 % (calculated value)(CARB VOC) (%w/w)

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

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.

# Safety Data Sheet

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

# 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

Acute toxicity (inhalation) :	Not classified	
Cinnamic aldehyde (104-55-2)		
LD50 oral rat	2220 mg/kg (Source: NLM_CIP)	
LD50 oral	2220 mg/kg	
LD50 dermal rabbit	1260 mg/kg (Source: EPA_HPV)	
Verdox (88-41-5)		
LD50 oral rat	4600 mg/kg (Source: NLM_CIP)	
LD50 oral	4600 mg/kg	
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)	
Diethyl malonate (105-53-3)		
LD50 oral rat	14900 μl/kg (Source: NLM_CIP)	
LD50 dermal rabbit	> 16960 mg/kg (Source: ECHA_API)	
Phenylpropyl alcohol (122-97-4)		
LD50 oral rat	2250 mg/kg (Source: NICNAS)	
LD50 oral	2275 mg/kg bodyweight	
LD50 dermal rabbit	< 5000 mg/kg (Source: NICNAS)	
LD50 dermal	5000 mg/kg bodyweight	
COUMARIN (91-64-5)		
LD50 oral rat	> 5000 mg/kg (Source: JAPAN_GHS)	
LD50 dermal rat	293 mg/kg (Source: ECHA_API)	
Vanillin (121-33-5)		
LD50 dermal rabbit	> 5010 mg/kg (Source: OECD_SIDS)	
LD50 dermal	2600 mg/kg bodyweight	
Verdyl acetate (5413-60-5)		
LD50 oral	3050 mg/kg bodyweight	
LD50 dermal rabbit	> 5000 mg/kg (Source: ECHA_API)	
Triplal (Vertocitral) (68039-49-6)		
LD50 oral	2330 mg/kg	

# Safety Data Sheet

Clove Leaf Oil (8000-34-8)	
LD50 oral rat	1370 mg/kg (Source: NZ_CCID)
LD50 oral	2650 mg/kg bodyweight
LD50 dermal rabbit	1200 mg/kg (Source: NLM_CIP)
LD50 dermal	2500 mg/kg bodyweight
Allyl heptanoate (142-19-8)	
LD50 oral rat	500 mg/kg (Source: NLM_CIP)
LD50 oral	218 mg/kg
LD50 dermal rabbit	810 mg/kg (Source: ECHA_API)
LD50 dermal	810 mg/kg
Allyl caproate (123-68-2)	
LD50 oral	218 mg/kg
LD50 dermal rabbit	820 mg/kg (Source: ECHA_API)
LD50 dermal	300 mg/kg
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 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)
Aldehyde C-6 (66-25-1)	
LD50 oral rat	4890 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 8100 mg/kg (Source: ECHA_API)
Skin corrosion/irritation :	Causes skin irritation.
Serious eye damage/irritation :	Causes serious eye irritation.
Respiratory or skin sensitisation :	May cause an allergic skin reaction.
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable
Benzyl acetate (140-11-4)	
IARC group	3 - Not classifiable
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified
benzyl benzoate (120-51-4)	
Viscosity, kinematic	7.456 mm²/s

# Safety Data Sheet

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

### 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

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

: Not classified

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term : Toxic to aquatic

(chronic)

: Toxic 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	
Diethyl malonate (105-53-3)		
LC50 - Fish [1]	10.3 – 13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	
EC50 - Crustacea [1]	202.3 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
EC50 72h - Algae [1]	508.2 mg/l (Species: Desmodesmus subspicatus)	
Vanillin (121-33-5)		
LC50 - Fish [1]	53 – 61.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	
LC50 - Fish [2]	88 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)	
NOEC (acute)	10000 mg/kg (Exposure time: 42 Days - Species: Eisenia foetida [soil dry weight])	
Allyl caproate (123-68-2)		
LC50 - Fish [1]	0.117 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)	
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)	
Aldehyde C-6 (66-25-1)		
LC50 - Fish [1]	12 – 16.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)	

### 12.2. Persistence and degradability

SPICED APPLE TODDY FR90098	
Persistence and degradability Not established.	
Cinnamic aldehyde (104-55-2)	
Persistence and degradability Rapidly degradable	

# Safety Data Sheet

Verdox (88-41-5)	
Persistence and degradability	Rapidly degradable
benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.
Diethyl malonate (105-53-3)	
Persistence and degradability	Rapidly degradable
Phenylpropyl alcohol (122-97-4)	
Persistence and degradability	Rapidly degradable
COUMARIN (91-64-5)	
Persistence and degradability	Rapidly degradable
Vanillin (121-33-5)	
Persistence and degradability	Rapidly degradable
Verdyl acetate (5413-60-5)	
Persistence and degradability	Rapidly degradable
Triplal (Vertocitral) (68039-49-6)	
Persistence and degradability	Rapidly degradable
Clove Leaf Oil (8000-34-8)	
Persistence and degradability	Rapidly degradable
Allyl heptanoate (142-19-8)	
Persistence and degradability	Rapidly degradable
Allyl caproate (123-68-2)	
Persistence and degradability	Rapidly degradable
benzaldehyde (100-52-7)	
Persistence and degradability	Rapidly degradable
Benzyl acetate (140-11-4)	
Persistence and degradability	Rapidly degradable
isopentyl acetate (123-92-2)	
Persistence and degradability	Rapidly degradable
Aldehyde C-6 (66-25-1)	
Persistence and degradability	Rapidly degradable
12.3. Bioaccumulative potential	
SPICED APPLE TODDY FR90098	
Bioaccumulative potential	Not established.
Cinnamic aldehyde (104-55-2)	
Partition coefficient n-octanol/water (Log Pow)	2.1065 (at 25 °C)

# Safety Data Sheet

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

harmal harmanta (420 54 4)			
benzyl benzoate (120-51-4)			
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)		
Bioaccumulative potential	Not established.		
Diethyl malonate (105-53-3)			
Partition coefficient n-octanol/water (Log Pow)	0.96		
Phenylpropyl alcohol (122-97-4)			
Partition coefficient n-octanol/water (Log Pow)	1.6 (at 35 °C (at pH 7)		
Vanillin (121-33-5)			
Partition coefficient n-octanol/water (Log Pow)	1.23 (at 22 °C)		
Verdyl acetate (5413-60-5)			
Partition coefficient n-octanol/water (Log Pow)	4.2 (at 30 °C (at pH 5.92)		
Allyl heptanoate (142-19-8)	Allyl heptanoate (142-19-8)		
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 20 °C (at pH 5.3)		
Allyl caproate (123-68-2)			
Partition coefficient n-octanol/water (Log Pow)	3.191 (at 20 °C (at pH 5)		
benzaldehyde (100-52-7)			
BCF - Fish [1]	(no significant bioaccumulation)		
Partition coefficient n-octanol/water (Log Pow)	1.4 (at 25 °C)		
Benzyl acetate (140-11-4)			
Partition coefficient n-octanol/water (Log Pow)	1.96 (at 25 °C (at pH 7)		
isopentyl acetate (123-92-2)			
Partition coefficient n-octanol/water (Log Pow)	2.7 (at 35 °C)		
Aldehyde C-6 (66-25-1)			
Partition coefficient n-octanol/water (Log Pow)	2.3 (at 25 °C (at pH 5)		

# 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

# 13.1. Waste treatment methods

Waste treatment methods

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

Product/Packaging disposal recommendations

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

Ecological information

Avoid release to the environment.

# Safety Data Sheet

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

HP Code

: HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

# **SECTION 14: Transport information**

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping	g name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX)	Environmentally hazardous substance, liquid, n.o.s. (VERDOX)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX)
Transport document descri	iption			
UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX), 9, III, (-)	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX), 9, III, MARINE POLLUTANT	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (VERDOX), 9,	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX), 9, III	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (VERDOX), 9, III
14.3. Transport hazard o	lass(es)			
9	9	9	9	9
***************************************	**************************************	**************************************	**************************************	**************************************
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary informatio	n available			

## 14.6. Special precautions for user

### **Overland transport**

Classification code (ADR) : M6

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

Limited quantities (ADR) : 5l Excepted quantities (ADR) : E1

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

Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions : TP1, TP29

(ADR)

Tank code (ADR) : LGBV

9/18/2024 (Issue date) EN (English) 18/22

# Safety Data Sheet

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

Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3082

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

Transport by sea

Special provisions (IMDG) : 274, 335, 969

: 5 L Limited quantities (IMDG) : E1 Excepted quantities (IMDG) : LP01, P001 Packing instructions (IMDG) Special packing provisions (IMDG) PP1 IBC packing instructions (IMDG) IBC03 Tank instructions (IMDG) T4 Tank special provisions (IMDG) TP1, TP29 EmS-No. (Fire) F-A EmS-No. (Spillage) : S-F Stowage category (IMDG) Α

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L

Special provisions (IATA) : A97, A158, A197, A215

ERG code (IATA) : 9L

**Inland waterway transport** 

Classification code (ADN) : M6

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

Limited quantities (ADN) : 5 L

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T

Equipment required (ADN) : PP

Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M6

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

Limited quantities (RID) : 5L Excepted quantities (RID) : E1

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

Special packing provisions (RID) : PP1
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions : TP1, TP29

(RID)

Tank codes for RID tanks (RID) : LGBV

Transport category (RID) : 3

Special provisions for carriage – Packages (RID) : W12

Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

# Safety Data Sheet

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

Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 90

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## **SECTION 15: Regulatory information**

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	isopentyl acetate ; Aldehyde C-6	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	SPICED APPLE TODDY FR90098; Cinnamic aldehyde; benzyl benzoate; Diethyl malonate; Phenylpropyl alcohol; Triplal (Vertocitral); Clove Leaf Oil; Allyl heptanoate; Allyl caproate; benzaldehyde	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)	SPICED APPLE TODDY FR90098; Cinnamic aldehyde; Verdox; benzyl benzoate; Verdyl acetate; Triplal (Vertocitral); Allyl heptanoate; Allyl caproate; 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 ; Aldehyde C-6	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

#### **REACH Annex XIV (Authorisation List)**

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

### **REACH Candidate List (SVHC)**

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

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

# **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

### Safety Data Sheet

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

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

Contains substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

#### VOC Directive (2004/42)

VOC content : 18.953 % (calculated value)(CARB VOC) (%w/w)

#### **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 no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### **France**

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

#### Germany

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907.

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

#### **Netherlands**

ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic

environment

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

SZW-lijst van reprotoxische stoffen – Borstvoeding

SZW-lijst van reprotoxische stoffen -

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling

Triplal (Vertocitral) is listed

Triplal (Vertocitral) is listed : None of the components are listed

: None of the components are listed

: None of the components are listed

#### **Denmark**

Class for fire hazard : Class III-1 Store unit 50 liter

Classification remarks : Flammable according to the Danish Ministry of Justice; Emergency management guidelines

for the storage of flammable liquids must be followed

**Danish National Regulations** Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with

the product

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

Other information · None

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3

# Safety Data Sheet

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

Full text of H- and EUH	Full text of H- and EUH-statements:		
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3		
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1		
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3		
Asp. Tox. 1	Aspiration hazard, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
H226	Flammable liquid and vapour.		
H301	Toxic if swallowed.		
H302	Harmful if swallowed.		
H304	May be fatal if swallowed and enters airways.		
H311	Toxic in contact with skin.		
H312	Harmful in contact with skin.		
H315	Causes skin irritation.		
H317	May cause an allergic skin reaction.		
H319	Causes serious eye irritation.		
H331	Toxic if inhaled.		
H400	Very toxic to aquatic life.		
H411	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
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		

The classification complies with Safety Data Sheet (SDS), EU

: ATP 12