

Trade name: Hesse UNA-COLOR ring proof, silky gloss PEX DB 45577-FT

Version: 8 / GB

Revision: 21.09.2022

Replaces Version: 7 / GB

Print date: 16.01.23

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

### 1.1. Product identifier

Hesse UNA-COLOR ring proof, silky gloss PEX DB 45577-FT

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

#### Use of the substance/preparation

Surface treatment of wood and other materials

#### Identified Uses

	REACHSET 1000
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROC7	Industrial spraying
	REACHSET 1001
SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROC13	Treatment of articles by dipping and pouring
	REACHSET 2001
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
PROC11	Non industrial spraying

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

#### Manufacturer

Hesse GmbH & Co. KG  
Warendorfer Strasse 21  
59075 Hamm (Germany)  
Telephone no. +49 (0) 2381 963-00  
Fax no. +49 (0) 2381 963-849  
E-mail address ps@hesse-lignal.de

### 1.4. Emergency telephone number

Germany: +49 (0) 2381 788-612

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)  
Flam. Liq. 2 H225

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STOT SE 3                      H336  
Aquatic Chronic 3            H412

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008  
For explanation of abbreviations see section 16.

## 2.2. Label elements

### Labelling according to regulation (EC) No 1272/2008

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements

H225                      Highly flammable liquid and vapour.  
H336                      May cause drowsiness or dizziness.  
H412                      Harmful to aquatic life with long lasting effects.

#### Precautionary statements

P210                      Keep away from heat, hot surfaces, sparks, open flames and other ignition  
                                  sources. No smoking.  
P261                      Avoid breathing dust/fume/gas/mist/vapours/spray.  
P273                      Avoid release to the environment.  
P280                      Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P340              IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P308+P313              IF exposed or concerned: Get medical advice/ attention.

#### Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains                      2-methoxy-1-methylethyl acetate; ethyl acetate; n-butyl acetate; isobutyl acetate

EUH208 Contains            methyl methacrylate, May produce an allergic reaction.

#### Supplemental information

EUH066                      Repeated exposure may cause skin dryness or cracking.

## SECTION 3: Composition/information on ingredients

### Hazardous ingredients

#### n-butyl acetate

CAS No.	123-86-4	
EINECS no.	204-658-1	
Registration no.	01-2119485493-29	
Concentration	>= 50	%
Classification (Regulation (EC) No. 1272/2008)		
	Flam. Liq. 3	H226
	STOT SE 3	H336
		EUH066

Nervous system

#### ethyl acetate

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CAS No.	141-78-6		
EINECS no.	205-500-4		
Registration no.	01-2119475103-46		
Concentration	>= 1	< 6	%
Classification (Regulation (EC) No. 1272/2008)			
	Flam. Liq. 2	H225	
	Eye Irrit. 2	H319	
	STOT SE 3	H336	Nervous system
		EUH066	

#### 2-methoxy-1-methylethyl acetate

CAS No.	108-65-6		
EINECS no.	203-603-9		
Registration no.	01-2119475791-29		
Concentration	>= 1	< 10	%
Classification (Regulation (EC) No. 1272/2008)			
	Flam. Liq. 3	H226	
	STOT SE 3	H336	

#### Hydrocarbons, C9, aromatics

CAS No.	128601-23-0		
EINECS no.	918-668-5		
Registration no.	01-2119455851-35		
Concentration	>= 1	< 3	%
Classification (Regulation (EC) No. 1272/2008)			
	Flam. Liq. 3	H226	
	Asp. Tox. 1	H304	
	Aquatic Chronic 2	H411	
	STOT SE 3	H335	Respiratory tract
	STOT SE 3	H336	Nervous system
		EUH066	

#### isobutyl acetate

CAS No.	110-19-0		
EINECS no.	203-745-1		
Registration no.	01-2119488971-22		
Concentration	>= 1	< 10	%
Classification (Regulation (EC) No. 1272/2008)			
	Flam. Liq. 2	H225	
	STOT SE 3	H336	Nervous system
		EUH066	

#### xylene

CAS No.	1330-20-7		
EINECS no.	215-535-7		
Registration no.	01-2119488216-32		
Concentration	>= 1	< 3	%
Classification (Regulation (EC) No. 1272/2008)			
	Flam. Liq. 3	H226	
	Acute Tox. 4	H332	Route of exposure: Inhalation exposure
	Acute Tox. 4	H312	Route of exposure: Dermal exposure

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Skin Irrit. 2	H315
Asp. Tox. 1	H304
STOT SE 3	H335
Eye Irrit. 2	H319

Respiratory tract; Route of exposure:  
inhalative

#### **methyl methacrylate**

CAS No.	80-62-6
EINECS no.	201-297-1
Registration no.	01-2119452498-28
Concentration	>= 0,1 < 1 %
Classification (Regulation (EC) No. 1272/2008)	
Flam. Liq. 2	H225
STOT SE 3	H335
Skin Irrit. 2	H315
Skin Sens. 1	H317

Respiratory tract

#### **Note**

For explanation of abbreviations see section 16.

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

### **4.1. Description of first aid measures**

#### **General information**

If unconscious place in recovery position and seek medical advice. In all cases of doubt, or when symptoms persist, seek medical attention. First aider: Pay attention to self-protection! Remove affected person from danger area, lay him down.

#### **After inhalation**

In case of accident by inhalation: remove casualty to fresh air and keep at rest. Keep warm, calm and covered up. In all cases of doubt, or when symptoms persist, seek medical attention.

#### **After skin contact**

Wash off immediately with soap and water. Do NOT use solvents or thinners. Consult a doctor if skin irritation persists.

#### **After eye contact**

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice. Take medical treatment.

#### **After ingestion**

Do not induce vomiting. Take medical treatment.

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

Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects.

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

#### **Hints for the physician / treatment**

Treat symptomatically.

## **SECTION 5: Firefighting measures**

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## 5.1. Extinguishing media

### Suitable extinguishing media

Recommended: alcohol resistant foam, CO<sub>2</sub>, powders, water spray/mist

### Non suitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

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

Fire will produce dense black smoke. In a fire, hazardous decomposition products may be produced.

Exposure to decomposition products may cause a health hazard. Vapours can form an explosive mixture with air.

## 5.3. Advice for firefighters

### Special protective equipment for fire-fighting

In case of combustion evolution of dangerous gases possible. Use self-contained breathing apparatus.

### Other information

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses. Standard procedure for chemical fires.

## SECTION 6: Accidental release measures

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

Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Do not inhale vapours. Do not inhale gases. Do not inhale mist.

### 6.2. Environmental precautions

Do not allow to enter drains or waterways. Do not allow to enter soil, waterways or waste water canal. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Do NOT use solvents or thinners. Send in suitable containers for recovery or disposal.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep container tightly closed and dry in a cool, well-ventilated place. Use only with adequate ventilation/personal protection. Ensure adequate ventilation. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values. Avoid contact with skin and eyes. Avoid inhalation of vapour and spray mist. Do not eat, drink or smoke when using this product. Use personal protective clothing. For personal protection see Section 8.

#### Advice on protection against fire and explosion

Vapours can form an explosive mixture with air. Vapours are heavier than air and may spread along

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floors. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Take measures to prevent the build up of electrostatic charge. Wear shoes with conductive soles. No sparking tools should be used. Fight fire with normal precautions from a reasonable distance.

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

### Requirements for storage rooms and vessels

Provide solvent-resistant and impermeable floor. Keep only in the original container in a cool, well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

### Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

### Storage classes

Storage class according to TRGS 510      3      Flammable liquid

### Further information on storage conditions

Protect from frost. Protect from heat and direct sunlight. Keep away from sources of ignition - No smoking. Store in accordance with the particular national regulations.

## 7.3. Specific end use(s)

See exposure scenario, if available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limit values

##### 2-methoxy-1-methylethyl acetate

List	Directive 2017/164 EG			
Value	275	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	550	mg/m <sup>3</sup>	100	ppm(V)
Status:	12/2009			

##### 2-methoxy-1-methylethyl acetate

List	EH40			
Value	274	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	548	mg/m <sup>3</sup>	100	ppm(V)
Skin resorption / sensibilisation:	Sk; Status: 01/2020			

##### ethyl acetate

List	Directive 2017/164 EG			
Value	734	mg/m <sup>3</sup>	200	ppm(V)
Short term exposure limit	1468	mg/m <sup>3</sup>	400	ppm(V)
Status:	02/2017			

##### ethyl acetate

List	EH40			
Value	734	mg/m <sup>3</sup>	200	ppm(V)
Short term exposure limit	1468	mg/m <sup>3</sup>	400	ppm(V)
Status:	01/2020			

##### n-butyl acetate

List	EH40			
Value	724	mg/m <sup>3</sup>	150	ppm(V)
Short term exposure limit	966	mg/m <sup>3</sup>	200	ppm(V)

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Status: 01/2020

**n-butyl acetate**

List	Directive 2017/164 EG			
Value	241	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	723	mg/m <sup>3</sup>	150	ppm(V)

Status: 10/2019

**xylene**

List	Directive 2017/164 EG			
Value	221	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	442	mg/m <sup>3</sup>	100	ppm(V)

Skin resorption / sensibilisation: H; Status: 12/2009

**xylene**

List	EH40			
Value	220	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	441	mg/m <sup>3</sup>	100	ppm(V)

Skin resorption / sensibilisation: Sk; Status: 01/2020

**Hydrocarbons, C9, aromatics**

List	EH40			
Value	500	mg/m <sup>3</sup>		

Status: 01/2020

**isobutyl acetate**

List	EH40			
Value	724	mg/m <sup>3</sup>	150	ppm(V)
Short term exposure limit	903	mg/m <sup>3</sup>	187	ppm(V)

Status: 01/2020

**isobutyl acetate**

List	Directive 2017/164 EG			
Value	241	mg/m <sup>3</sup>	50	ppm(V)
Short term exposure limit	723	mg/m <sup>3</sup>	150	ppm(V)

Status: 10/2019

**Other information**

-

**Derived No/Minimal Effect Levels (DNEL/DMEL)**

**2-methoxy-1-methylethyl acetate**

Type of value	Derived No Effect Level (DNEL)			
Reference group	Workers (professional)			
Duration of exposure	Long-term			
Route of exposure	inhalative			
Mode of action	Systemic effects			
Concentration	275			mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)			
Reference group	Workers (professional)			
Duration of exposure	Long-term			
Route of exposure	Dermal exposure			
Mode of action	Systemic effects			
Concentration	153,5			mg/kg/d

Type of value	Derived No Effect Level (DNEL)			
Reference group	Consumer			



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Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	1,67	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	33	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	54,8	mg/kg

**ethyl acetate**

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	63	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	734	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	734	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	1468	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	



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Concentration	1468	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Short-term
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Route of exposure	inhalative
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Mode of action	Systemic effects
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Concentration	734	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Short-term
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Route of exposure	inhalative
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Mode of action	Local effects
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Concentration	734	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	37	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Systemic effects
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Concentration	367	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	Oral exposure
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Mode of action	Systemic effects
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Concentration	4,5	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Local effects
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Concentration	367	mg/m <sup>3</sup>
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**n-butyl acetate**

Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (professional)
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	11	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	600	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	600	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	300	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	300	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	6	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	2	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	300	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	

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Concentration	300	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Systemic effects
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Concentration	35,7	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Local effects
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Concentration	35,7	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Short term
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Route of exposure	oral
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Mode of action	Specific effects
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Concentration	2	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Short term
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Route of exposure	Dermal exposure
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Mode of action	Specific effects
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Concentration	6	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Worker
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Duration of exposure	Short term
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Route of exposure	Dermal exposure
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Mode of action	Specific effects
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Concentration	11	mg/kg/d
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**xylene**

Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	125	mg/kg
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (professional)
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	212	mg/kg
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	65,3	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	260	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	174	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	442	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	221	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	289	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	289	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	

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Concentration	12,5	mg/kg/d
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (professional)
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Duration of exposure	Short-term
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Route of exposure	Dermal exposure
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Mode of action	Local effects
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Concentration	174	mg/kg/d
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**Hydrocarbons, C9, aromatics**

Type of value	Derived No Effect Level (DNEL)
---------------	--------------------------------

Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	Oral exposure
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Mode of action	Systemic effects
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Concentration	11	mg/kg
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Type of value	Derived No Effect Level (DNEL)
---------------	--------------------------------

Reference group	Workers (professional)
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	25	mg/kg
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	Dermal exposure
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Mode of action	Systemic effects
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Concentration	11	mg/kg
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (professional)
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Systemic effects
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Concentration	150	mg/kg
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Type of value	Derived No Effect Level (DNEL)
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Reference group	Consumer
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Systemic effects
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Concentration	32	mg/kg
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**methyl methacrylate**

Type of value	Derived No Effect Level (DNEL)
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Reference group	Workers (industrial)
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Duration of exposure	Long-term
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Route of exposure	inhalative
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Mode of action	Local effects
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Concentration	210	mg/m <sup>3</sup>
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Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	210	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Local effects	
Concentration	1,5	mg/cm <sup>2</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	13,67	mg/kg/d
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Local effects	
Concentration	1,5	mg/cm <sup>2</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	105	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	74,3	mg/m <sup>3</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Local effects	
Concentration	1,5	mg/cm <sup>2</sup>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	

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Mode of action	Systemic effects	
Concentration	8,2	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Local effects	
Concentration	1,5	mg/cm²

**isobutyl acetate**

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	10	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	300	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	300	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	5	mg/kg/d

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	35,7	mg/m³

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	35,7	mg/m³



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Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	300	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	300	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	600	mg/m <sup>3</sup>

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	600	mg/m <sup>3</sup>

### **Predicted No Effect Concentration (PNEC)**

#### **2-methoxy-1-methylethyl acetate**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,635	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0,0635	mg/l

Type of value	PNEC	
Conditions	sporadic release	
Concentration	6,35	mg/l

Type of value	PNEC	
Type	Fresh water sediment	
Concentration	3,29	mg/kg

Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,329	mg/kg

Type of value	PNEC	
Type	Soil	



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Concentration 0,29 mg/kg

Type of value PNEC  
Type Sewage treatment plant (STP)  
Concentration 100 mg/l

**ethyl acetate**

Type of value PNEC  
Type Saltwater  
Concentration 0,026 mg/l

Type of value PNEC  
Type Freshwater  
Concentration 0,26 mg/l

Type of value PNEC  
Type Soil  
Concentration 0,24 mg/kg

Type of value PNEC  
Type Sewage treatment plant (STP)  
Concentration 650 mg/l

Type of value PNEC  
Type saltwater sediment  
Concentration 0,125 mg/kg

Type of value PNEC  
Type Fresh water sediment  
Concentration 1,25 mg/kg

Type of value PNEC  
Conditions sporadic release  
Concentration 1,65 mg/l

**n-butyl acetate**

Type of value PNEC  
Type Freshwater  
Concentration 0,18 mg/l

Type of value PNEC  
Type Saltwater  
Concentration 0,018 mg/l

Type of value PNEC  
Type Sewage treatment plant (STP)  
Concentration 35,6 mg/l

Type of value PNEC  
Type Water  
Conditions sporadic release  
Concentration 0,36 mg/l

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Type of value	PNEC	
Type	Fresh water sediment	
Concentration	0,981	mg/kg

Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,0981	mg/l

Type of value	PNEC	
Type	Soil	
Concentration	0,0903	mg/kg

#### **xylene**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,327	mg/l

Type of value	PNEC	
Type	Saltwater	
Concentration	0,327	mg/l

Type of value	PNEC	
Type	Fresh water sediment	
Concentration	12,46	mg/kg

Type of value	PNEC	
Type	saltwater sediment	
Concentration	12,46	mg/kg

Type of value	PNEC	
Type	Soil	
Concentration	2,31	mg/kg

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	6,58	mg/l

#### **methyl methacrylate**

Type of value	PNEC	
Type	Freshwater	
Concentration	0,94	mg/l

Type of value	PNEC	
Type	marine water	
Concentration	0,094	mg/l

Type of value	PNEC	
Type	Soil	
Concentration	1,47	mg/kg

#### **isobutyl acetate**

Type of value	PNEC	
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Type	Freshwater	
Concentration	0,17	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0,017	mg/l
Type of value	PNEC	
Type	Water	
Conditions	sporadic release	
Concentration	0,34	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	200	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	0,877	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,0877	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0,0755	mg/kg

## 8.2. Exposure controls

### Exposure controls

Users are advised to consider national Occupational Exposure Limits or other equivalent values. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

### Respiratory protection

Avoid inhalation of vapour and spray mist. Use breathing apparatus if exposed to vapours/dust/aerosol. Recommended Filter type: Respiratory protection mask with combination filter A/P2

### Hand protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material Fluorinated rubber / butyl-rubber

Material thickness  $\geq$  0,7 mm

Breakthrough time  $\geq$  30 min

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

The breakthrough time must be greater than the end use time of the product.

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Gloves should be replaced regularly and if there is any sign of damage to the glove material.  
The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

#### **Eye protection**

Wear eye glasses with side protection according to EN 166.

#### **Body protection**

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

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

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

**Physical state** liquid  
**Colour** coloured  
**Odour** solvent-like

#### **Melting point**

Remarks not determined

#### **Freezing point**

Remarks not determined

#### **Boiling point or initial boiling point and boiling range**

Value 74 to 200 °C

#### **Flammability**

not determined

#### **Upper and lower explosive limits**

Remarks not determined

#### **Flash point**

Value 21 to 22 °C

#### **Ignition temperature**

Remarks not determined

#### **Decomposition temperature**

Remarks not determined

#### **Viscosity**

Remarks not determined

#### **Solubility(ies)**

Remarks not determined

#### **Partition coefficient n-octanol/water (log value)**

Remarks not determined

#### **Vapour pressure**

Remarks not determined

#### **Density and/or relative density**

Value appr. 0,983 kg/l  
Temperature 20 °C

#### **Relative vapour density**

Remarks not determined

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### Particle characteristics

Remarks not determined

## 9.2. Other information

### Odour threshold

Remarks not determined

### Evaporation rate

Remarks not determined

### Solubility in water

Remarks not determined

### Efflux time

Value 45 to 45 s  
Temperature 20 °C  
Method DIN 53211 4 mm

### Explosive properties

evaluation not determined

### Oxidising properties

Remarks not determined

### Non-volatile content

Value 32,7 %  
Method calculated value

### Other information

This information is not available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under recommended storage and handling conditions (see section 7).

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

To avoid thermal decomposition, do not overheat.

### 10.4. Conditions to avoid

Isolate from sources of heat, sparks and open flame.

### 10.5. Incompatible materials

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide, nitrous oxides (NO<sub>x</sub>), dense black smoke, No decomposition if used as prescribed.

## SECTION 11: Toxicological information

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

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### Acute oral toxicity

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Acute dermal toxicity

ATE > 10.000 mg/kg  
Method calculated value (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Acute dermal toxicity (Components)

#### xylene

ATE 2000 mg/kg  
Source alle Daten über 2000 mg/kg

### Acute inhalational toxicity

ATE > 20 mg/l  
Administration/Form Dust/Mist  
Method calculated value (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Acute inhalative toxicity (Components)

#### xylene

ATE 5 mg/l  
Duration of exposure 4 h  
Administration/Form Dust/Mist  
Source alle Werte über 5 mg/l

### Skin corrosion/irritation

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Skin corrosion/irritation (Components)

#### xylene

Species rabbit  
Observation Period 72 h  
evaluation Irritating to skin.  
Source 2 (reliable with restrictions)

#### methyl methacrylate

evaluation Irritating to skin.

### Serious eye damage/irritation

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Serious eye damage/irritation (Components)

#### ethyl acetate

Species rabbit  
Observation Period 24 h  
evaluation Irritating to eyes.  
Source 2 (reliable with restrictions)

#### xylene

Species rabbit  
evaluation Irritating to eyes.  
Source 2 (reliable with restrictions)



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### Sensitization

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Sensitization (Components)

#### methyl methacrylate

Species mouse  
evaluation May cause sensitization by skin contact.

### Mutagenicity

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Reproductive toxicity

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Carcinogenicity

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity (STOT)

#### Single exposure

Method Calculation method (Regulation (EC) No. 1272/2008)  
Remarks The classification criteria are met.  
evaluation May cause drowsiness or dizziness.

#### Repeated exposure

Remarks Based on available data, the classification criteria are not met.

### Specific Target Organ Toxicity (STOT) (Components)

#### 2-methoxy-1-methylethyl acetate

##### Specific target organ toxicity - repeated exposure

evaluation May cause drowsiness or dizziness.  
Organs: Nervous system

#### ethyl acetate

##### Specific target organ toxicity - single exposure

Organs: Nervous system  
Remarks Possible narcotic effects (drowsiness, dizziness).

#### n-butyl acetate

##### Specific target organ toxicity - repeated exposure

Organs: Nervous system  
Remarks Possible narcotic effects (drowsiness, dizziness).

#### xylene

##### Specific target organ toxicity - single exposure

Route of exposure inhalative  
Organs: Respiratory tract  
Remarks May cause respiratory irritation.

### Hydrocarbons, C9, aromatics

##### Specific target organ toxicity - single exposure

Route of exposure inhalative  
Remarks Possible narcotic effects (drowsiness, dizziness).

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#### Hydrocarbons, C9, aromatics

##### Specific target organ toxicity - single exposure

Remarks Possible narcotic effects (drowsiness, dizziness).

#### methyl methacrylate

##### Specific target organ toxicity - single exposure

Remarks Organs: Respiratory tract  
May cause respiratory irritation.

#### isobutyl acetate

##### Specific target organ toxicity - repeated exposure

Remarks Organs: Nervous system  
Possible narcotic effects (drowsiness, dizziness).

#### Aspiration hazard

Based on available data, the classification criteria are not met.

### 11.2 Information on other hazards

#### Other information

No toxicological data are available.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### General information

For this subsection there is no ecotoxicological data available on the product as such.

#### Fish toxicity (Components)

##### Hydrocarbons, C9, aromatics

Species	Oncorhynchus mykiss (rainbow trout)		
LC50	9,2		mg/l
Duration of exposure	96	h	

##### methyl methacrylate

Species	Pimephales promelas (fathead minnow)		
LC50	130		mg/l
Duration of exposure	96	h	

#### Daphnia toxicity (Components)

##### Hydrocarbons, C9, aromatics

Species	Daphnia magna (Water flea)		
EC50	3,2		mg/l
Duration of exposure	48	h	

##### Hydrocarbons, C9, aromatics

Species	Daphnia magna (Water flea)		
NOEC	2,14		mg/l
Duration of exposure	21	d	

#### Algae toxicity (Components)

##### Hydrocarbons, C9, aromatics

Species	Pseudokirchneriella subcapitata (green algae)		
EC50	2,6	to	2,9 mg/l
Duration of exposure	72	h	

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## 12.2. Persistence and degradability

### General information

For this subsection there is no ecotoxicological data available on the product as such.

### Biodegradability (Components)

#### Hydrocarbons, C9, aromatics

evaluation Readily biodegradable.

## 12.3. Bioaccumulative potential

### General information

For this subsection there is no ecotoxicological data available on the product as such.

### Partition coefficient n-octanol/water (log value)

Remarks not determined

## 12.4. Mobility in soil

### General information

For this subsection there is no ecotoxicological data available on the product as such.

### Mobility in soil

no data available

## 12.5. Results of PBT and vPvB assessment

### General information

For this subsection there is no ecotoxicological data available on the product as such.

## 12.6 Endocrine disrupting properties

### Endocrine disrupting properties with respect to the environment

The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

## 12.7. Other adverse effects

### General information

For this subsection there is no ecotoxicological data available on the product as such.

### General information / ecology

For this subsection there is no ecotoxicological data available on the product as such.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations for the product

EWC waste code 080111 - waste paint and varnish containing organic solvents  
or other dangerous substances

EWC waste code 200127 - paint, inks, adhesives and resins containing  
dangerous substances

Where possible recycling is preferred to disposal or incineration.

Do not allow to enter drains or waterways.

#### modified product

EWC waste code 080113 - sludges from paint or varnish containing organic  
solvents or other dangerous substances

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EWC waste code

080115 - aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

#### Dried residues

EWC waste code

080112 - waste lacquers and waste paint except those falling under 080111




#### Disposal recommendations for packaging

EWC waste code

150110 - packaging containing residues of or contaminated by dangerous substances

Completely emptied packagings can be given for recycling.

### SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D/E		
14.1. UN number	1263	1263	1263
14.2. UN proper shipping name	PAINT	PAINT	PAINT
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	II	II	II
Special provision	640D		
Limited Quantity	5 I		
Transport category	2		

### SECTION 15: Regulatory information \*\*\*

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

##### VOC \*\*\*

VOC (EU) 67,3 % 662 g/l

#### 15.2. Chemical safety assessment

For this substance / mixture a chemical safety assessment was not carried out.

### SECTION 16: Other information

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### **Hazard statements listed in Chapter 3**

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

### **CLP categories listed in Chapter 3**

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 2	Flammable liquid, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

### **Abbreviations**

Flam. Liq - Flammable liquids  
RID - Règlement international concernant le transport des marchandises dangereuses par chemin de fer  
(Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG - International Maritime Code for Dangerous Goods  
IATA - International Air Transport Association  
IATA-DGR - Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO-TI - Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS - Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS - European Inventory of Existing Commercial Chemical Substances  
CAS - Chemical Abstracts Service (division of the American Chemical Society)  
GefStoffV - Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
LOAEL - Lowest Observed Adverse Effect Level  
LOEL - Lowest Observed Effect Level  
NOAEL - No Observed Adverse Effect Level  
NOEC - No Observed Effect Concentration  
NOEL - No Observed Effect Level  
OECD - Organisation for Economic Cooperation and Development  
VOC - Volatile Organic Compounds  
Changes since the last version are highlighted in the margin (\*\*\*). This version replaces all previous versions.  
This safety datasheet only contains information relating to safety and does not replace any product information or product specification.  
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.  
The information relates only to the specific material designated and may not be valid for such material

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used in combination with any other materials or in any process, unless specified in the text.  
The information contained herein is based on the present state of our knowledge and does therefore not  
guarantee certain properties.

## **Annex to the extended Safety Data Sheet (eSDS)**

### **Short title of the exposure scenario**

ES001 - Industrial applications: industrial spraying (inside)

### **Use of the substance/preparation**

Surface treatment of wood and other materials

### **Use**

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROC7	Industrial spraying

## **Contributing exposure scenario controlling environmental exposure**

### **Use**

ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix

### **Physical form**

liquid

### **Maximum amount used per time or activity**

Emission days per site: <= 300

### **Other relevant operational conditions**

Use: Room temperature  
Drying and through-curing takes place at ambient temperature or at higher temperatures.  
Where possible recycling is preferred to disposal or incineration.  
Do not allow to enter soil, waterways or waste water canal.  
Dispose of rinse water in accordance with local and national regulations.

### **Waste water**

Do not discharge into the drains/surface waters/groundwater. Spray cabin waters are to be conducted after mechanical pretreatment into a wastewater treatment facility.

### **Exhaust air**

Keep container closed. Avoid release to the environment.

### **Soil**

Floors should be impervious, resistant to liquids and easy to clean.

### **Disposal recommendations for the product**

EWC waste code	080111 - waste paint and varnish containing organic solvents or other dangerous substances
	200127 - paint, inks, adhesives and resins containing dangerous substances

Where possible recycling is preferred to disposal or incineration.  
Do not allow to enter drains or waterways.

### **modified product**

EWC waste code	080113 - sludges from paint or varnish containing organic
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solvents or other dangerous substances  
080115 - aqueous sludges containing paint or varnish  
containing organic solvents or other dangerous substances

#### Dried residues

EWC waste code

080112 - waste lacquers and waste paint except those falling  
under 080111

#### Disposal recommendations for packaging

EWC waste code

150110 - packaging containing residues of or contaminated  
by dangerous substances

Completely emptied packagings can be given for recycling.

### Contributing exposure scenario controlling worker exposure

#### Use

SU3

Industrial uses: Uses of substances as such or in preparations at industrial sites

PROC7

Industrial spraying

#### Physical form

liquid

#### Maximum amount used per time or activity

Duration of exposure

<= 8 h/d

Frequency of exposure

<= 220 d/a

#### Other relevant operational conditions

Use: Room temperature

Drying and through-curing takes place at ambient temperature or at higher temperatures.

Read attached instructions before use.

#### Product substance and product safety related measures

Mainly used in closed systems. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

#### Respiratory protection

Avoid inhalation of vapour and spray mist. Use breathing apparatus if exposed to vapours/dust/aerosol.

Recommended Filter type: Respiratory protection mask with combination filter A/P2

#### Hand protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material

Fluorinated rubber / butyl-rubber

Material thickness

>= 0,7

Breakthrough time

>= 30

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

The breakthrough time must be greater than the end use time of the product.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor



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maintenance.

### Eye protection

Wear eye glasses with side protection according to EN 166.

### Body protection

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

## Exposure estimation and reference to its source

### Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	27,54 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,1
Lead substance	2-methoxy-1-methylethyl acetate

### Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - local and systemic
Exposure assessment	2,14 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,01
Lead substance	2-methoxy-1-methylethyl acetate

### Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	55,08 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,2
Lead substance	2-methoxy-1-methylethyl acetate

### Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - local and systemic
Exposure assessment	27,43 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,18
Lead substance	2-methoxy-1-methylethyl acetate

### Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	55,08 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,2
Lead substance	2-methoxy-1-methylethyl acetate

### Workers (industrial)

SU	SU3
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PROC  
Assessment method  
Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method

Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method

Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method

Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method  
Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method  
Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

SU  
PROC  
Assessment method  
Risk characterisation ratio (RCR)  
Lead substance

**Workers (industrial)**

PROC  
Assessment method

Exposure assessment

PROC13  
dermal, long-term - local and systemic  
13,71 mg/kg/d  
ECETOC TRA  
0,09  
2-methoxy-1-methylethyl acetate

SU3  
PROC7  
inhalation, long-term - systemic  
Indoor use  
0,75  
4-methylpentan-2-one

SU3  
PROC7  
dermal, long-term - systemic  
Indoor use  
0,5  
4-methylpentan-2-one

SU3  
PROC10  
inhalation, long-term - systemic  
Indoor use  
0,5  
4-methylpentan-2-one

SU3  
PROC10  
dermal, long-term - systemic  
0,5  
4-methylpentan-2-one

SU3  
PROC13  
inhalation, long-term - systemic  
0,5  
4-methylpentan-2-one

SU3  
PROC13  
dermal, long-term - systemic  
0,5  
4-methylpentan-2-one

PROC7  
inhalation, long-term - local and systemic  
Indoor use  
60,5 mg/m<sup>3</sup>

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Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

ECETOC TRA  
0,126  
n-butyl acetate

**Workers (industrial)**

PROC  
Assessment method

PROC10  
inhalation, long-term - systemic  
Indoor use

Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

242 mg/m<sup>3</sup>  
ECETOC TRA  
0,504  
n-butyl acetate

**Workers (industrial)**

PROC  
Assessment method

PROC10  
inhalation, long-term - systemic  
Outdoor use

Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

242 mg/m<sup>3</sup>  
ECETOC TRA  
0,504  
n-butyl acetate

**Workers (industrial)**

PROC  
Assessment method

PROC13  
inhalation, long-term - systemic  
Indoor use

Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

242 mg/m<sup>3</sup>  
ECETOC TRA  
0,504  
n-butyl acetate

**Workers (industrial)**

PROC  
Assessment method

PROC13  
inhalation, long-term - systemic  
Outdoor use

Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

242 mg/m<sup>3</sup>  
ECETOC TRA  
0,504  
n-butyl acetate

**Workers (industrial)**

SU  
PROC  
Assessment method

SU3  
PROC7  
inhalative  
Indoor use

Exposure assessment  
Exposure assessment (method)  
Risk characterisation ratio (RCR)  
Lead substance

0,1 mg/m<sup>3</sup>  
ECETOC TRA  
0,34  
xylene

**Workers (industrial)**

SU  
PROC  
Assessment method

SU3  
PROC10  
inhalative  
Indoor use

Exposure assessment

0,05 mg/m<sup>3</sup>

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Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,172
Lead substance	xylene
<b>Workers (industrial)</b>	
SU	SU3
PROC	PROC13
Assessment method	inhalative
	Indoor use
Exposure assessment	0,1 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,34
Lead substance	xylene

## **Information on estimated exposure and downstream-user guidance**

### **Guidance for Downstream Users**

The downstream user can evaluate whether he operates within the conditions set in the exposure scenario on the basis of the information supplied. This evaluation can be conducted by an expert or using the risk assessment tools recommended by ECHA.

## **Annex to the extended Safety Data Sheet (eSDS)**

### **Short title of the exposure scenario**

ES002 - Industrial applications: rolling, dipping, pouring and other processing without aerosol formation (inside)

### **Use of the substance/preparation**

Surface treatment of wood and other materials

### **Use**

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix
PROCh01	Other processing without aerosol formation
PROCh02	roller coating industrial
PROC13	Treatment of articles by dipping and pouring

## **Contributing exposure scenario controlling environmental exposure**

### **Use**

ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
ERC5	Industrial use resulting in inclusion into or onto a matrix

### **Physical form**

liquid

### **Maximum amount used per time or activity**

Emission days per site: <= 300

### **Other relevant operational conditions**

Use: Room temperature  
Drying and through-curing takes place at ambient temperature or at higher temperatures.  
Where possible recycling is preferred to disposal or incineration.  
Do not allow to enter soil, waterways or waste water canal.

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Dispose of rinse water in accordance with local and national regulations.

#### **Waste water**

Do not discharge into the drains/surface waters/groundwater.

#### **Exhaust air**

Keep container closed. Avoid release to the environment.

#### **Soil**

Floors should be impervious, resistant to liquids and easy to clean.

#### **Disposal recommendations for the product**

EWC waste code	080111 - waste paint and varnish containing organic solvents or other dangerous substances
	200127 - paint, inks, adhesives and resins containing dangerous substances

Where possible recycling is preferred to disposal or incineration.

Do not allow to enter drains or waterways.

#### **modified product**

EWC waste code	080113 - sludges from paint or varnish containing organic solvents or other dangerous substances
	080115 - aqueous sludges containing paint or varnish containing organic solvents or other dangerous substances

#### **Dried residues**

EWC waste code	080112 - waste lacquers and waste paint except those falling under 080111
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#### **Disposal recommendations for packaging**

EWC waste code	150110 - packaging containing residues of or contaminated by dangerous substances
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Completely emptied packagings can be given for recycling.

### **Contributing exposure scenario controlling worker exposure**

#### **Use**

SU3	Industrial uses: Uses of substances as such or in preparations at industrial sites
PROCh01	Other processing without aerosol formation
PROCh02	roller coating industrial
PROC13	Treatment of articles by dipping and pouring

#### **Physical form**

liquid

#### **Maximum amount used per time or activity**

Duration of exposure	<=	8	h/d
Frequency of exposure	<=	220	d/a

#### **Other relevant operational conditions**

Use: Room temperature

Drying and through-curing takes place at ambient temperature or at higher temperatures.

Read attached instructions before use.

#### **Product substance and product safety related measures**

Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

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### Respiratory protection

Avoid inhalation of vapour and spray mist. Use breathing apparatus if exposed to vapours/dust/aerosol.  
Recommended Filter type: Respiratory protection mask with combination filter A/P2

### Hand protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material Fluorinated rubber / butyl-rubber

Material thickness  $\geq$  0,7

Breakthrough time  $\geq$  30

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

The breakthrough time must be greater than the end use time of the product.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

### Eye protection

Wear eye glasses with side protection according to EN 166.

### Body protection

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

## Exposure estimation and reference to its source

#### Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	27,54 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,1
Lead substance	2-methoxy-1-methylethyl acetate

#### Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - local and systemic
Exposure assessment	2,14 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,01
Lead substance	2-methoxy-1-methylethyl acetate

#### Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	55,08 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,2

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Lead substance

2-methoxy-1-methylethyl acetate

**Workers (industrial)**

SU

SU3

PROC

PROC10

Assessment method

dermal, long-term - local and systemic

Exposure assessment

27,43 mg/kg/d

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,18

Lead substance

2-methoxy-1-methylethyl acetate

**Workers (industrial)**

SU

SU3

PROC

PROC13

Assessment method

inhalation, long-term - local and systemic

Exposure assessment

55,08 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,2

Lead substance

2-methoxy-1-methylethyl acetate

**Workers (industrial)**

SU

SU3

PROC

PROC13

Assessment method

dermal, long-term - local and systemic

Exposure assessment

13,71 mg/kg/d

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,09

Lead substance

2-methoxy-1-methylethyl acetate

**Workers (industrial)**

SU

SU3

PROC

PROC7

Assessment method

inhalation, long-term - systemic

Risk characterisation ratio (RCR)

0,75

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

SU

SU3

PROC

PROC7

Assessment method

dermal, long-term - systemic

Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

SU

SU3

PROC

PROC10

Assessment method

inhalation, long-term - systemic

Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

SU

SU3

PROC

PROC10

Assessment method

dermal, long-term - systemic



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Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

SU

SU3

PROC

PROC13

Assessment method

inhalation, long-term - systemic

Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

SU

SU3

PROC

PROC13

Assessment method

dermal, long-term - systemic

Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (industrial)**

PROC

PROC7

Assessment method

inhalation, long-term - local and systemic

Indoor use

Exposure assessment

60,5 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,126

Lead substance

n-butyl acetate

**Workers (industrial)**

PROC

PROC10

Assessment method

inhalation, long-term - systemic

Indoor use

Exposure assessment

242 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,504

Lead substance

n-butyl acetate

**Workers (industrial)**

PROC

PROC10

Assessment method

inhalation, long-term - systemic

Outdoor use

Exposure assessment

242 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,504

Lead substance

n-butyl acetate

**Workers (industrial)**

PROC

PROC13

Assessment method

inhalation, long-term - systemic

Indoor use

Exposure assessment

242 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,504

Lead substance

n-butyl acetate

**Workers (industrial)**

PROC

PROC13

Assessment method

inhalation, long-term - systemic

Outdoor use

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Exposure assessment	242	mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,504	
Lead substance	n-butyl acetate	

**Workers (industrial)**

SU	SU3	
PROC	PROC7	
Assessment method	inhalative	
	Indoor use	
Exposure assessment	0,1	mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,34	
Lead substance	xylene	

**Workers (industrial)**

SU	SU3	
PROC	PROC10	
Assessment method	inhalative	
	Indoor use	
Exposure assessment	0,05	mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,172	
Lead substance	xylene	

**Workers (industrial)**

SU	SU3	
PROC	PROC13	
Assessment method	inhalative	
	Indoor use	
Exposure assessment	0,1	mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,34	
Lead substance	xylene	

## **Information on estimated exposure and downstream-user guidance**

### **Guidance for Downstream Users**

The downstream user can evaluate whether he operates within the conditions set in the exposure scenario on the basis of the information supplied. This evaluation can be conducted by an expert or using the risk assessment tools recommended by ECHA.

## **Annex to the extended Safety Data Sheet (eSDS)**

### **Short title of the exposure scenario**

ES003 - Professional uses: Non industrial spraying (inside)

### **Use of the substance/preparation**

Surface treatment of wood and other materials

### **Use**

SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
PROC11	Non industrial spraying

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## **Contributing exposure scenario controlling environmental exposure**

### **Use**

ERC8a Wide dispersive indoor use of processing aids in open systems  
ERC8c Wide dispersive indoor use resulting in inclusion into or onto a matrix

### **Physical form**

liquid

### **Maximum amount used per time or activity**

Emission days per site: <= 250

### **Other relevant operational conditions**

Use: Room temperature  
Drying and through-curing takes place at ambient temperature or at higher temperatures.  
Volatile organic substances will volatilise into the atmospheric air inside.  
Where possible recycling is preferred to disposal or incineration.  
Do not allow to enter soil, waterways or waste water canal.  
Dispose of rinse water in accordance with local and national regulations.

### **Waste water**

Do not discharge into the drains/surface waters/groundwater. Spray cabin waters are to be conducted after mechanical pretreatment into a wastewater treatment facility.

### **Exhaust air**

Keep container closed. Avoid release to the environment.

### **Soil**

Floors should be impervious, resistant to liquids and easy to clean.

### **Disposal recommendations for the product**

EWC waste code 080111 - waste paint and varnish containing organic solvents  
or other dangerous substances  
200127 - paint, inks, adhesives and resins containing  
dangerous substances

Where possible recycling is preferred to disposal or incineration.  
Do not allow to enter drains or waterways.

### **modified product**

EWC waste code 080113 - sludges from paint or varnish containing organic  
solvents or other dangerous substances  
080115 - aqueous sludges containing paint or varnish  
containing organic solvents or other dangerous substances

### **Dried residues**

EWC waste code 080112 - waste lacquers and waste paint except those falling  
under 080111

### **Disposal recommendations for packaging**

EWC waste code 150110 - packaging containing residues of or contaminated  
by dangerous substances  
Completely emptied packagings can be given for recycling.

## **Contributing exposure scenario controlling worker exposure (professional)**

### **Short title of the exposure scenario**

Substance number: CES006

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## Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
PROC11 Non industrial spraying

## Physical form

liquid

## Maximum amount used per time or activity

Duration of exposure	<=	8	h/d
Frequency of exposure	<=	220	d/a

## Other relevant operational conditions

Use: Room temperature  
Drying and through-curing takes place at ambient temperature or at higher temperatures.  
Volatile organic substances will volatilise into the atmospheric air inside.  
Read attached instructions before use.

## Product substance and product safety related measures

Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide for sufficient ventilation. This can be achieved by local exhaust or general exhaust air collection. Wear a suitable respirator if the ventilation is not sufficient to keep the solvent vapour concentration below the occupational limit values.

## Respiratory protection

Avoid inhalation of vapour and spray mist. Use breathing apparatus if exposed to vapours/dust/aerosol.  
Recommended Filter type: Respiratory protection mask with combination filter A/P2

## Hand protection

Protective gloves complying with EN 374.  
Glove material  
Multilayer gloves made from  
Appropriate Material Fluorinated rubber / butyl-rubber  
Material thickness >= 0,7  
Breakthrough time >= 30

This recommendation is valid only for the product named in this safety data sheet supplied by us, and only for the indicated intended use purposes.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

The breakthrough time must be greater than the end use time of the product.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

## Eye protection

Wear eye glasses with side protection according to EN 166.

## Body protection

Wear suitable protective clothing. Remove contaminated clothing and wash it before reuse. Wash hands before breaks and after work.

## Exposure estimation and reference to its source

### Workers (professional)

SU	SU22
PROC	PROC13

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Assessment method	inhalation, long-term - local and systemic
Exposure assessment	55,08 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,2
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC13
Assessment method	dermal, long-term - local and systemic
Exposure assessment	13,71 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,09
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	137,71 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,5
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - local and systemic
Exposure assessment	27,43 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,18
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - local and systemic Indoor use
Exposure assessment	27,54 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,1
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - local and systemic Indoor use
Exposure assessment	2,14 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,01
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC11

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Assessment method	inhalation, long-term - local and systemic
	Outdoor use
Exposure assessment	55,08 mg/m <sup>3</sup>
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,2
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - local and systemic
	Outdoor use
Exposure assessment	107,14 mg/kg/d
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,7
Lead substance	2-methoxy-1-methylethyl acetate
SU	SU21
Assessment method	dermal, long-term - systemic
	Indoor use

Exposure assessment	6 mg/kg/d
Exposure assessment (method)	ConsExpo v4.1
Risk characterisation ratio (RCR)	0,11
Lead substance	2-methoxy-1-methylethyl acetate
SU	SU21
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	6,83 mg/m <sup>3</sup>
Exposure assessment (method)	ConsExpo v4.1
Risk characterisation ratio (RCR)	0,6
Lead substance	2-methoxy-1-methylethyl acetate

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - systemic
Risk characterisation ratio (RCR)	0,5
Lead substance	4-methylpentan-2-one

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
Risk characterisation ratio (RCR)	0,1
Lead substance	4-methylpentan-2-one

**Workers (professional)**

SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - systemic
Risk characterisation ratio (RCR)	0,5
Lead substance	4-methylpentan-2-one

**Workers (professional)**

SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic

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Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (professional)**

SU

SU22

PROC

PROC13

Assessment method

inhalation, long-term - systemic

Risk characterisation ratio (RCR)

0,75

Lead substance

4-methylpentan-2-one

**Workers (professional)**

SU

SU22

PROC

PROC13

Assessment method

dermal, long-term - systemic

Risk characterisation ratio (RCR)

0,5

Lead substance

4-methylpentan-2-one

**Workers (professional)**

SU

SU22

PROC

PROC11

Assessment method

Long-term

inhalative

Exposure assessment

242 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,504

Lead substance

n-butyl acetate

**Workers (professional)**

SU

SU22

PROC

PROC10

Assessment method

inhalative

Indoor use

Exposure assessment

0,05 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,172

Lead substance

xylene

**Workers (professional)**

SU

SU22

PROC

PROC11

Assessment method

inhalative

Indoor use

Exposure assessment

0,1 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,34

Lead substance

xylene

**Workers (professional)**

SU

SU22

PROC

PROC13

Assessment method

inhalative

Indoor use

Exposure assessment

0,05 mg/m<sup>3</sup>

Exposure assessment (method)

ECETOC TRA

Risk characterisation ratio (RCR)

0,172

Lead substance

xylene



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## **Information on estimated exposure and downstream-user guidance**

### **Guidance for Downstream Users**

The downstream user can evaluate whether he operates within the conditions set in the exposure scenario on the basis of the information supplied. This evaluation can be conducted by an expert or using the risk assessment tools recommended by ECHA.