

Trade name: Hesse PU Acrylic Brilliant lacquer DU 429

Version: 18 / GB

Revision: 22.09.2020

Replaces Version: 17 / GB

Print date: 28.09.20

## 1. Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Hesse PU Acrylic Brilliant lacquer DU 429

### 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

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	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
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	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  
 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

## 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. 3	H226
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

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**Hazard pictograms****Signal word**

Warning

**Hazard statements**

H226 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 n-butyl acetate; Hydrocarbons, C9, aromatics; 2-methoxy-1-methylethyl acetate

**Supplemental information**

EUH066 Repeated exposure may cause skin dryness or cracking.

**2.3. Other hazards**

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB) (if not listed in Section 3).

**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	Nervous system
		EUH066	

**Hydrocarbons, C9, aromatics**

EINECS no.	918-668-5		
Registration no.	01-2119455851-35		
Concentration	>= 3	< 10	%
Classification (Regulation (EC) No. 1272/2008)	Flam. Liq. 3	H226	
	Asp. Tox. 1	H304	

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Aquatic Chronic 2	H411	
STOT SE 3	H335	Respiratory tract
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	

**di-isobutyl ketone**

CAS No.	108-83-8			
EINECS no.	203-620-1			
Registration no.	01-2119474441-41			
Concentration	>= 1	<	10	%
Classification (Regulation (EC) No. 1272/2008)				
	Flam. Liq. 3		H226	
	STOT SE 3		H335	

Concentration limits (Regulation (EC) No. 1272/2008)

STOT SE 3	H335	>= 10
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**Note**

For explanation of abbreviations see section 16.  
This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57) (if not listed in Section 3).

**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**

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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.

### **5. Firefighting measures**

#### **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.

### **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.

### **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

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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 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.

## 8. Exposure controls/personal protection

### 8.1. Control parameters

#### 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

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Concentration	153,5	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	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
<b>n-butyl acetate</b>		
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	11	mg/kg/d
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>
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)	

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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	
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	inhalative	
Mode of action	Systemic effects	
Concentration	35,7	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	Local effects	
Concentration	35,7	mg/m <sup>3</sup>
<b>Hydrocarbons, C9, aromatics</b>		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	

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Mode of action	Systemic effects	
Concentration	11	mg/kg

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	25	mg/kg

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	11	mg/kg

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	150	mg/kg

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	32	mg/kg

**di-isobutyl ketone**

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	290	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	290	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	290	mg/m <sup>3</sup>



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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	80	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	479	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	145	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	145	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	Local effects	
Concentration	145	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	28,5	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	171	mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

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

Type of value	PNEC
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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		
Concentration	0,29		mg/kg
Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Concentration	100		mg/l
<b>n-butyl acetate</b>			
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
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

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Type of value	PNEC		
Type	Soil		
Concentration	0,0903		mg/kg
<b>di-isobutyl ketone</b>			
Type of value	PNEC		
Type	Freshwater		
Concentration	0,03		mg/l
Type of value	PNEC		
Type	marine water		
Concentration	0,003		mg/l
Type of value	PNEC		
Conditions	sporadic release		
Concentration	0,3		mg/l
Type of value	PNEC		
Type	Fresh water sediment		
Concentration	0,46		mg/kg
Type of value	PNEC		
Type	saltwater sediment		
Concentration	0,046		mg/kg
Type of value	PNEC		
Type	Sewage treatment plant (STP)		
Concentration	2,55		mg/l

## 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 >= 0,7 mm

Breakthrough time >= 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.

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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.

**9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

<b>Form</b>	liquid		
<b>Colour</b>	colourless		
<b>Odour</b>	solvent-like		
<b>Odour threshold</b>			
Remarks	not determined		
<b>pH value</b>			
Remarks	not determined		
<b>Melting point</b>			
Remarks	not determined		
<b>Freezing point</b>			
Remarks	not determined		
<b>Initial boiling point and boiling range</b>			
Remarks	not determined		
<b>Flash point</b>			
Value	28		°C
<b>Evaporation rate</b>			
Remarks	not determined		
<b>Flammability (solid, gas)</b>			
not determined			
<b>Upper/lower flammability or explosive limits</b>			
Remarks	not determined		
<b>Vapour pressure</b>			
Remarks	not determined		
<b>Vapour density</b>			
Remarks	not determined		
<b>Density</b>			
Value	appr. 0,962		kg/l
Temperature	20		°C
<b>Solubility in water</b>			
Remarks	not determined		
<b>Solubility(ies)</b>			

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Remarks not determined

**Partition coefficient: n-octanol/water**

Remarks not determined

**Ignition temperature**

Remarks not determined

**Decomposition temperature**

Remarks not determined

**Viscosity**

Remarks not determined

**Efflux time**

Value	38	to	52	s
Temperature	20	°C		
Method	DIN EN ISO 2431 - 3 mm			

**Explosive properties**

evaluation not determined

**Oxidising properties**

Remarks not determined

**9.2. Other information****Non-volatile content**

Value	34,9	%
Method	calculated value	

**Other information**

This information is not available.

**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.**11. Toxicological information****11.1. Information on toxicological effects**

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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**

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

**Acute inhalational toxicity**

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

**Skin corrosion/irritation**

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

**Serious eye damage/irritation**

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

**Sensitization**

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

**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)****n-butyl acetate****Specific target organ toxicity - repeated exposure**

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

**di-isobutyl ketone****Specific target organ toxicity - single exposure**

Organs: Respiratory tract  
 Remarks May cause respiratory irritation.

**Hydrocarbons, C9, aromatics**

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**Specific target organ toxicity - single exposure**

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

**Hydrocarbons, C9, aromatics****Specific target organ toxicity - single exposure**

Remarks Possible narcotic effects (drowsiness, dizziness).

**2-methoxy-1-methylethyl acetate****Specific target organ toxicity - repeated exposure**

evaluation May cause drowsiness or dizziness.  
Organs: Nervous system

**Aspiration hazard**

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

**Other information**

No toxicological data are available.

**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)****di-isobutyl ketone**

Species	Oncorhynchus mykiss (rainbow trout)		
LC50	140		mg/l
Duration of exposure	96	h	

**Hydrocarbons, C9, aromatics**

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

**Daphnia toxicity (Components)****di-isobutyl ketone**

Species	Daphnia magna (Water flea)		
EC50	250		mg/l
Duration of exposure	48	h	

**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)****di-isobutyl ketone**

Species	Pseudokirchneriella subcapitata (green algae)		
EC50	100		mg/l
Duration of exposure	96	h	

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**Hydrocarbons, C9, aromatics**

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

**12.2. Persistence and degradability****General information**

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

**Biodegradability (Components)****di-isobutyl ketone**

Value	88	%
Duration of test evaluation	20	d

Readily biodegradable.

**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**

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. 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.

**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.



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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  
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.  
Completely emptied packagings can be given for recycling.

**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	III	III	III
Limited Quantity	5 l		
Transport category	3		

**15. Regulatory information**

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

**VOC**

VOC (EU) 65,2 % 627 g/l

**15.2. Chemical safety assessment**

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

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## 16. Other information

### Hazard statements listed in Chapter 3

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
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

Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 3	Flammable liquid, Category 3
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 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

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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: &lt;= 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.  
 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**

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EWC waste code 150110 - packaging containing residues of or contaminated by dangerous substances

Completely emptied packagings can be given for recycling.  
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 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.

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## 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
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

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**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
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	inhalation, long-term - systemic
	Indoor use
Exposure assessment	0,020 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,029
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (industrial)**

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SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,429 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,143
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (industrial)**

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	0,010 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,014
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (industrial)**

SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,274 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,914
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (industrial)**

SU	SU3
PROC	PROC13
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	0,002 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,003
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (industrial)**

SU	SU3
PROC	PROC13
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,274 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,914
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**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.

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## **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

## **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: &lt;= 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.  
 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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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.

Completely emptied packagings can be given for recycling.

**Contributing exposure scenario controlling worker exposure (professional)****Short title of the exposure scenario**

Substance number:CES006

**Use**

SU22

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

PROC11

Non industrial spraying  
liquid

**Physical form****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.

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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
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

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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	
<b>Workers (professional)</b>		
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	
<b>Workers (professional)</b>		
SU	SU22	
PROC	PROC11	
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	
<b>Workers (professional)</b>		
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	
<b>Workers (professional)</b>		
SU	SU22	
PROC	PROC11	
Assessment method	Long-term inhalative	
Exposure assessment	242	mg/m <sup>3</sup>

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Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,504
Lead substance	n-butyl acetate
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	0,002 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,003
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,257 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,857
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	0,0004 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,0006
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,1097 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,366
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - systemic
	Outdoor use
Exposure assessment	0,0007 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,001
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
<b>Workers (professional)</b>	
SU	SU22
PROC	PROC11

Trade name: Hesse PU Acrylic Brilliant lacquer DU 429

Version: 18 / GB

Revision: 22.09.2020

Replaces Version: 17 / GB

Print date: 28.09.20

Assessment method	dermal, long-term - systemic Outdoor use
Exposure assessment	0,214 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,714
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - systemic Outdoor use
Exposure assessment	0,001 mg/m <sup>3</sup>
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,002
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**Workers (professional)**

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic Outdoor use
Exposure assessment	0,1097 mg/kg/d
Exposure assessment (method)	EASY TRA v3.5
Risk characterisation ratio (RCR)	0,366
Lead substance	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol

**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.