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

1.1. Product identifier

Hesse COOL-FILL HP 6645-9343

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 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

2. Hazards identification

2.1. Classification of the substance or mixture

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

This product is not classified hazardous in accordance with Regulation (EC) No 1272/2008.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, May produce an allergic reaction.

Supplemental information

EUH210 Safety data sheet available on request.

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

2-(2-butoxyethoxy)ethanol

CAS No.	112-34-5			
EINECS no.	203-961-6			
Registration no.	01-2119475104-44			
Concentration	>= 1	<	10	%

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

Eye Irrit. 2	H319

Ammonia

CAS No.	7664-41-7			
EINECS no.	215-647-6			
Registration no.	01-2119488876-14			
Concentration	>= 0,1	<	1	%

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

Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

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

STOT SE 3	H335	>= 5 %

1,2-benzisothiazol-3(2H)-one

CAS No.	2634-33-5			
EINECS no.	220-120-9			
Concentration		<	0,05	%

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

Acute Tox. 4	H302
Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 2	H411

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

Skin Sens. 1	H317	>= 0,05 %

Silicon dioxide

CAS No.	14808-60-7			
Concentration	1			%

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

STOT RE 1	H372	caused by the presence of respirable quartz

Further ingredients

(2-methoxymethylethoxy)propanol

CAS No.	34590-94-8					
EINECS no.	252-104-2					
Registration no.	01-2119450011-60					
Concentration		>=	1	<	10	%

Advice: [3]
Classification (Regulation (EC) No. 1272/2008)
Not classified.

Note
[3] Substance with occupational exposure limits

4. First aid measures

4.1. Description of first aid measures

General information
Remove affected person from danger area, lay him down. In all cases of doubt, or when symptoms persist, seek medical attention. Get medical advice/attention if you feel unwell. First aider: Pay attention to self-protection!

After inhalation
When spray fog inhaled, seek medical aid.

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.

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, CO2, 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.

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

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

Keep container tightly closed and dry in a cool, well-ventilated place. Avoid contact with skin and eyes. Avoid inhalation of vapour and spray mist. Do no 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

Fight fire with normal precautions from a reasonable distance.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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	10	Flammable liquids

Further information on storage conditions

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

8. Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

(2-methoxymethylethoxy)propanol

List	Directive 2017/164 EG			
Value	308	mg/m³	50	ppm(V)

Status: 12/2009

(2-methoxymethylethoxy)propanol

List	EH40			
Value	308	mg/m³	50	ppm(V)

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

2-(2-butoxyethoxy)ethanol

List	EH40			
Value	67,5	mg/m³	10	ppm(V)
Short term exposure limit	101,2	mg/m³	15	ppm(V)

Status: 01/2020

2-(2-butoxyethoxy)ethanol

List	Directive 2017/164 EG			
Value	67,5	mg/m³	10	ppm(V)
Short term exposure limit	101,2	mg/m³	15	ppm(V)

Status: 12/2009

Other information

-

Derived No/Minimal Effect Levels (DNEL/DMEL)

(2-methoxymethylethoxy)propanol

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	65	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	310	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	15	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	37,2	mg/m³

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

2-(2-butoxyethoxy)ethanol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	14	ppm

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	20	mg/kg/d

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	10	ppm

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	10	ppm

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	7,5	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	10	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	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	1,3	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	Local effects	
Concentration	5	mg/m³

Predicted No Effect Concentration (PNEC)

(2-methoxymethylethoxy)propanol

Type of value	PNEC	
Type	Freshwater	
Concentration	19	mg/l
Type of value	PNEC	
Type	marine water	
Concentration	1,9	mg/l
Type of value	PNEC	
Conditions	sporadic release	
Concentration	190	mg/l
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	4168	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	70,2	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	7,02	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	2,74	mg/kg

2-(2-butoxyethoxy)ethanol

Type of value	PNEC	
Type	Freshwater	
Concentration	1	mg/l

Type of value	PNEC	
Type	marine water	
Concentration	0,1	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	4	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	0,4	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	200	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	0,4	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			
Appropriate Material	butyl-rubber		
Material thickness	>=	0,5	mm
Breakthrough time	>=	120	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.
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

Form liquid

Colour white

Odour characteristic

Odour threshold

Remarks not determined

pH value

Value		8			
Concentration/H2O		100			

Melting point

Remarks not determined

Freezing point

Remarks not determined

Initial boiling point and boiling range

Value		100	to	195	°C

Flash point

Value	>	60		°C

Flammability (solid, gas)

not determined

Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

Value	appr.	1,368		kg/l
Temperature		20	°C	

Solubility in water

Remarks not determined

Solubility(ies)

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	25	to	28	s
Temperature	20	°C		
Method	DIN 53211 - 6 mm			

Explosive properties

evaluation: not determined

Oxidising properties

Remarks: not determined

9.2. Other information

Non-volatile content

Value	60,4	%
Method	calculated value	

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 (NOx), dense black smoke, No decomposition if used as prescribed.

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

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

Acute oral toxicity (Components)

1,2-benzisothiazol-3(2H)-one

Species	rat	
LD50	1193	mg/kg

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.

Skin corrosion/irritation (Components)

Ammonia

evaluation	Causes burns.

1,2-benzisothiazol-3(2H)-one

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)

2-(2-butoxyethoxy)ethanol

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

Ammonia

1,2-benzisothiazol-3(2H)-one

evaluation	Irritating to eyes.

Sensitization

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

Sensitization (Components)

1,2-benzisothiazol-3(2H)-one

Reference substance	1,2-benzisothiazol-3(2H)-one
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	Based on available data, the classification criteria are not met.

Repeated exposure

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

Specific Target Organ Toxicity (STOT) (Components)

Silicon dioxide

Specific target organ toxicity - repeated exposure

Organs: Lungs

Remarks Causes damage to organs through prolonged or repeated exposure:

Ammonia

Specific target organ toxicity - single exposure

Organs: Respiratory tract

Remarks May cause respiratory irritation.

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)

Ammonia

Species	Lepomis macrochirus (Bluegill sunfish)			
LC50	0,26	to	4,6	mg/l
Duration of exposure	96	h		

1,2-benzisothiazol-3(2H)-one

Species	Oncorhynchus mykiss (rainbow trout)		
LC50	2,18		mg/l
Duration of exposure	96	h	

Daphnia toxicity (Components)

1,2-benzisothiazol-3(2H)-one

Species	Daphnia magna (Water flea)		
EC50	2,94		mg/l
Duration of exposure	48	h	

12.2. Persistence and degradability

General information

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

Biodegradability (Components)

1,2-benzisothiazol-3(2H)-one

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.

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	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.

14. Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	Not classified as dangerous in the meaning of transport regulations.	Not classified as dangerous in the meaning of sea and air transport regulations.	Not a dangerous substance as defined in the above regulations.

15. Regulatory information

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

VOC

VOC (EU)	5,8	%	80	g/l

16. Other information

Hazard statements listed in Chapter 3

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity - repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Abbreviations

ADR - Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID - Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning theInternational 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 Econpmic 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

ES017 - 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.
Curing takes place through UV light exposure (only with UV light curing systems).
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	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.
Curing takes place through UV light exposure (only with UV light curing systems).
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

Appropriate Material	butyl-rubber	
Material thickness	>=	0,5
Breakthrough time	>=	120

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	7 ppm
Risk characterisation ratio (RCR)	0,7
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (industrial)

SU	SU3
PROC	PROC7
Assessment method	dermal, long-term - systemic
Exposure assessment	2,14 mg/kg/d
Risk characterisation ratio (RCR)	0,11
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	0,5 ppm
Risk characterisation ratio (RCR)	0,05
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (industrial)

SU	SU3
PROC	PROC10
Assessment method	dermal, long-term - systemic
Exposure assessment	5,49 mg/kg/d
Risk characterisation ratio (RCR)	0,27
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	2 ppm
Risk characterisation ratio (RCR)	0,2
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (industrial)

SU	SU3
PROC	PROC13
Assessment method	dermal, long-term - systemic
Exposure assessment	0,69 mg/kg/d
Risk characterisation ratio (RCR)	0,034

Lead substance	2-(2-butoxyethoxy)ethanol

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

ES019 - 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: <= 250

Other relevant operational conditions

Use: Room temperature
Drying and through-curing takes place at ambient temperature or at higher temperatures.
Curing takes place through UV light exposure (only with UV light curing systems).
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.

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	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:CES038

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.
Curing takes place through UV light exposure (only with UV light curing systems).
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

Appropriate Material	butyl-rubber	
Material thickness	>=	0,5
Breakthrough time	>=	120

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	PROC10
Assessment method	inhalation, long-term - local and systemic
	Outdoor use
Exposure assessment	2,5 ppm
Risk characterisation ratio (RCR)	0,25
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Outdoor use
Exposure assessment	2,74 mg/kg/d
Risk characterisation ratio (RCR)	0,137
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - local and systemic
	Indoor use
Exposure assessment	1,25 ppm
Risk characterisation ratio (RCR)	0,125
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	0,55 mg/kg/d
Risk characterisation ratio (RCR)	0,027
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - local and systemic
	Indoor use

Exposure assessment	5 ppm
Risk characterisation ratio (RCR)	0,5
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	2,14 mg/kg/d
Risk characterisation ratio (RCR)	0,107
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - local and systemic Outdoor use
Exposure assessment	4,2 ppm
Risk characterisation ratio (RCR)	0,42
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic Outdoor use
Exposure assessment	1,29 mg/kg/d
Risk characterisation ratio (RCR)	0,42
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	inhalation, long-term - local and systemic Indoor use
Exposure assessment	2 ppm
Risk characterisation ratio (RCR)	0,2
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	dermal, long-term - systemic Indoor use
Exposure assessment	0,69 mg/kg/d
Risk characterisation ratio (RCR)	0,034
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	inhalation, long-term - local and systemic Outdoor use
Exposure assessment	4,2 ppm
Risk characterisation ratio (RCR)	0,42
Lead substance	2-(2-butoxyethoxy)ethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	dermal, long-term - systemic Outdoor use
Exposure assessment	0,41 mg/kg/d
Risk characterisation ratio (RCR)	0,42
Lead substance	2-(2-butoxyethoxy)ethanol

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.