

Version: 53 / DE

Replaces Version: 52 / DE

SECTION 1: Identificat	ion of the substance/mixture and of the company/undertaking
1.1. Product identifier glimtrex SIGNUM 2	-Pack Lacquer satin 103002
1.2. Relevant identifie	d uses of the substance or mixture and uses advised against
Use of the substance/ Surface treatment of	<b>/preparation</b> of wood and other materials
Identified Uses	
	 REACHSET 2003
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
ERC8a ERC8c PROC10	Wide dispersive indoor use of processing aids in open systems Wide dispersive indoor use resulting in inclusion into or onto a matrix Roller application or brushing
SU3 ERC4	REACHSET 1000 Industrial uses: Uses of substances as such or in preparations at industrial sites Industrial use of processing aids in processes and products, not becoming part of
ERC5 PROC7	articles Industrial use resulting in inclusion into or onto a matrix Industrial spraying 
SU21 ERC8a ERC8c PROC10	REACHSET 3003 Consumer uses: Private households (= general public = consumers) Wide dispersive indoor use of processing aids in open systems Wide dispersive indoor use resulting in inclusion into or onto a matrix Roller application or brushing
1.3. Details of the sup	plier of the safety data sheet
Manufacturer glimtrex GmbH Orkotten 68 48291 Telgte Telephone no. Fax no. E-mail address	+49 (0) 2504 88887-111 +49 (0) 2504 88887-112 info@glimtrex.de
<b>1.4. Emergency teleph</b> Germany: +49 (0) 3	
SECTION 2: Hazards ic	lentification
Classification (Reg	t <b>he substance or mixture</b> ulation (EC) No. 1272/2008) classified hazardous in accordance with Regulation (EC) No 1272/2008.
2.2. Label elements	



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

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3- one [EC no. 220-239-6] (3:1); reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3- one [EC no. 220-239-6] (3:1), 2,4,7,9tetramethyldec-5-yne-4,7-diol, May produce an allergic reaction.

#### Supplemental information

EUH210

Safety data sheet available on request.

#### 2.3. Other hazards

The product contains no PBT substances. The product contains no vPvB substances. This product does not contain a substance that has endocrine disrupting properties with respect to human. The product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms.

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

#### Hazardous ingredients

2-butoxyethanol

2-butoxyethanol						
CAS No.	111-76-2					
EINECS no.	203-905-0					
Registration no.	01-2119475108-36					
Concentration	>= 1	<	6	%		
Classification (R	egulation (EC) No. 1272/2008)					
	Acute Tox. 4	H302		Route of exposure: Oral exposure		
	Acute Tox. 4	H312		Route of exposure: Dermal exposure		
	Acute Tox. 4	H332		Route of exposure: Inhalation		
		11002		exposure		
	Eye Irrit. 2	H319		expedite		
	Skin Irrit. 2	H315				
	Skin int. 2	11313				
ATE	Oral exposure	1.200		mg/kg		
ATE	Dermal exposure	435				
ATE				mg/kg		
AIE	Inhalation exposure,	2,56		mg/l		
	Dust/Mist					
2-(2-butoxyethox						
CAS No.	112-34-5					
EINECS no.	203-961-6					
Registration no.	01-2119475104-44					
Concentration	>= 1	<	3	%		
Classification (R	egulation (EC) No. 1272/2008)					
·	Eye Irrit. 2	H319				
2-dimethylaminoethanol						
CAS No.	108-01-0					
EINECS no.	203-542-8					
Registration no.						
Concentration	>= 0,1	<	1	%		
• • • • • • • • • • • • • • • • • • • •	egulation (EC) No. 1272/2008)	•		/0		
	Flam. Liq. 3	H226				
	Acute Tox. 3	H220		Pouto of exposure: Inhalation		
	Acute TOX. 5	10001		Route of exposure: Inhalation		



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		11040		exposure
	Acute Tox. 4 Acute Tox. 4	H312 H302		Route of exposure: Dermal exposure Route of exposure: Oral exposure
	Skin Corr. 1B	H314		
	STOT SE 3	H335		Respiratory tract
Concentration li	mits (Regulation (EC) No. 1272		-	
ATE	STOT SE 3 H33 Inhalation exposure,	5 >= 0,5	5 mg/l	
, <u> </u>	Dust/Mist	0,0		
2,4,7,9-tetrameth CAS No.	yldec-5-yne-4,7-diol 126-86-3			
EINECS no.	204-809-1			
Registration no.	01-2119954390-39			
Concentration	>= 0,1 Regulation (EC) No. 1272/2008)	<	1	%
	Eye Dam. 1	H318		
	Skin Sens. 1B	H317		
	Aquatic Chronic 3	H412		
1,2-benzisothiazo	ol-3(2H)-one			
CAS No.	2634-33-5			
EINECS no. Concentration	220-120-9	<	0,05	%
	egulation (EC) No. 1272/2008)		0,00	
	Acute Tox. 4	H302		
	Skin Irrit. 2 Eye Dam. 1	H315 H318		
	Skin Sens. 1	H317		
	Aquatic Acute 1 Aquatic Chronic 2	H400 H411		
	Aqualic Chronic 2	11411		
Concentration li	mits (Regulation (EC) No. 1272 Skin Sens. 1   H31			
reaction mass of			0,05 %	. 247-500-7] and 2-methyl-2H -
isothiazol-3- one	[EC no. 220-239-6] (3:1); read	ction ma	ss of: 5-ch	loro-2- methyl-4-isothiazolin-3-one
[EC no. 247-500- CAS No.	7] and 2-methyl-4-isothiazolin 55965-84-9	1-3- one	[EC no. 220	0-239-6] (3:1)
CAS No. Concentration	55905-04-9	<	0,001	%
Classification (R	egulation (EC) No. 1272/2008)			
	Acute Tox. 2 Acute Tox. 2	H330 H310		
	Acute Tox. 2 Acute Tox. 3	H301		
	Skin Corr. 1B	H314		
	Skin Sens. 1 Aquatic Acute 1	H317 H400		
	Aquatic Acute 1 Aquatic Chronic 1	H400 H410		
	Eye Dam. 1	H318		
Concentration li	mits (Regulation (EC) No. 1272	/2008)		
	Skin Corr. 1C H31	4 >=	0,6 %	
	Skin Irrit. 2 H31	5 >=	0,06 %	



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Eye Irrit. 2	H319	>= 0,06 %
Skin Sens. 1	H317	>= 0,0015 %
Eye Dam. 1	H318	>= 0,6 %
Aquatic Chronic	H410	M = 100
1		
Aquatic Acute 1	H400	M = 100

Note

For explanation of abbreviations see section 16.

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

#### 4.1. Description of first aid measures

#### **General information**

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

#### After inhalation

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

#### After skin contact

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

#### After eye contact

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

#### After ingestion

Do not induce vomiting. Take medical treatment.

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

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

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

#### Hints for the physician / treatment

Treat symptomatically.

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

#### 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. Vapours can form an explosive mixture with air.



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### 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.

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

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

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

#### 6.2. Environmental precautions

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

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

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

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

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

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage.



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Hints on storage assembly	1. f	and a Hanka start of		4
Store away from oxidising agen	is, from stro	ongly alkaline and stro	ngiy acid ma	alerials.
Storage classes			a shi shi shi shi	_
Storage class according to TRO			mable liquids	5
Further information on storage	•		roop of !!!	ion No ampling Otana in
Keep away from heat. Protect fi accordance with the particular r			ices of ignit	ION - INO SITIOKING. STOPE IN
<b>7.3. Specific end use(s)</b> See exposure scenario, if availa	able.			
SECTION 8: Exposure controls/	personal	protection		
8.1. Control parameters				
Exposure limit values				
2-butoxyethanol				
List	TRGS 900			
Value Maximum limit value: 2(1): Skir	49 reservation	mg/m <sup>3</sup>	10 Status: 06	ppm(V)
Maximum limit value: 2(I); Skir	rresorption		Status: 00	12022
2-butoxyethanol List	Directive 2	2017/164 EG		
Value	98	mg/m <sup>3</sup>	20	ppm(V)
Short term exposure limit Skin resorption / sensibilisation:	246 : H; Status:	mg/m <sup>3</sup> 12/2009	50	ppm(V)
2-(2-butoxyethoxy)ethanol				
List Value	TRGS 900 67	) mg/m³	10	nnm(1/1)
Maximum limit value: 1,5(I); Pi	• ·			ppm(V)
2-(2-butoxyethoxy)ethanol	3 <u>.</u>	,,	-	
List		2017/164 EG		
Value	67,5	mg/m <sup>3</sup>	10	ppm(V)
Short term exposure limit Status: 12/2009	101,2	mg/m³	15	ppm(V)
Other information				
- Derived No/Minimal Effect Le	vels (DNEI	L/DMEL)		
2-butoxyethanol				
Type of value		o Effect Level (DNEL)		
Reference group		orofessional)		
Duration of exposure Route of exposure	Long-term Dermal ex			
Mode of action	Acute effe			
Concentration	89		m	g/kg
Type of value	Derived N	o Effect Level (DNEL)		
Reference group	Workers (	professional)		
Duration of exposure	Long-term			
Route of exposure Mode of action	inhalative Local effe	ots		



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Type of value Reference group Duration of exposure Route of extoosure ConcentrationDerived No Effect Level (DNEL) Workers (professional) Long-term Duration of exposure Systemic effects 200mg/kg/dType of value Reference group Duration of exposure Route of exposure ConcentrationDerived No Effect Level (DNEL) Workers (professional) Long-term inhalative 200ppmType of value Reference group Duration of exposure Route of exposure ConcentrationDerived No Effect Level (DNEL) Workers (professional) 200ppmType of value Reference group Duration of exposure Route of exposure ConcentrationDerived No Effect Level (DNEL) Workers (professional) Short-termppmType of value Route of exposure Derived No Effect Level (DNEL) Workers (professional) Duration of exposure Derived No Effect Level (DNEL) Workers (professional)pmType of value Route of exposure Note of exposure Derived No Effect Level (DNEL) Workers (professional)mg/kg/dType of value Route of exposure Nort-term Route of exposure Route of exposure Duration of exposure Duration of exposure Nort-termDerived No Effect Level (DNEL) Workers (professional) Duration of exposure Systemic effects Systemic effects Systemic effects Systemic effects Systemic effects Systemic effects Systemic effects Systemic effects ConcentrationDerived No Effect Level (DNEL) Workers (professional) Lorg-term Oral exposure Systemic effects Systemic	Concentration	246	mg/m³
Reference group Workers (professional)   Duration of exposure Long-term   Route of exposure Dermal exposure   Mode of action 75   Concentration 75   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 20 ppm   Type of value Derived No Effect Level (DNEL)   Reference group Workers (professional)   Duration of exposure Derived No Effect Level (DNEL)   Reference group Workers (professional)   Duration of exposure Derived No Effect Level (DNEL)   Reference group Workers (professional)   Duration of exposure inhalative   Mode of action Systemic effects   Concentration 246 mg/m³   Type of value Derived No Effect Level (DNEL)   Reference group Workers (professional)   Duration of exposure inhalative   Mode of action 246 mg/	Type of value	Derived No Effect Level (DNEL)	
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Reference group Duration of exposure Route of exposure Mode of action ConcentrationWorkers (professional) Short-term inhalative 1091mg/m3Type of value Reference group Duration of exposure Mode of action ConcentrationDerived No Effect Level (DNEL) Workers (professional) Duration of exposure Mode of action Concentrationmg/m3Type of value Reference group Mode of action ConcentrationDerived No Effect Level (DNEL) Workers (professional) Duration of exposure Mode of action Concentrationmg/w3Type of value Reference group Mode of action ConcentrationDerived No Effect Level (DNEL) Workers (professional) Duration of exposure Short-term Route of exposure Concentrationmg/kg/dType of value Reference group Duration of exposure Route of exposure Route of exposure Route of exposure ConcentrationDerived No Effect Level (DNEL) Morkers (professional) Duration of exposure Short-term Route of exposure Route	Type of value	Derived No Effect Level (DNEL)	
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Reference groupWorkers (professional)Duration of exposureShort-termRoute of exposureOral exposureMode of actionSystemic effectsConcentration13,4Type of valueDerived No Effect Level (DNEL)	Concentration	3,2	mg/kg/d
Reference groupWorkers (professional)Duration of exposureShort-termRoute of exposureOral exposureMode of actionSystemic effectsConcentration13,4Type of valueDerived No Effect Level (DNEL)	Type of value	Derived No Effect Level (DNEL)	
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Mode of actionSystemic effectsConcentration13,4mg/kg/dType of valueDerived No Effect Level (DNEL)			
Concentration13,4mg/kg/dType of valueDerived No Effect Level (DNEL)			
			mg/kg/d
		Derived No Effect Level (DNEL)	
		· · · · ·	
	Reference group	workers (professional)	



Trade name: glimtrex SIGNUM 2-Pack Lacquer satin 103002

Version: 53 / DE

Replaces Version: 52 / DE

Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	123	mg/m³
-	-	<b>J</b>
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Acute effects	
Concentration	44,5	mg/kg
Type of value	Derived No Effect Level (DNEL)	
	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Acute effects	
Concentration	426	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	6,3	mg/kg
Transformer		
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	106,4	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	38	mg/kg
		5 5
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	59	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	49	mg/m³
Concernation	<del>ت</del>	iiig/iii



Trade name: glimtrex SIGNUM 2-Pack Lacquer satin 103002

Version: 53 / DE

Replaces Version: 52 / DE

Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	Oral exposure	
Mode of action	Systemic effects	
Concentration	26,7	mg/kg/d
Concentration	20,1	mg/ng/ld
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	135	mg/m³
Concentration	100	ilig/ili
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	147	mg/m³
Concontration		
Type of value	Derived No Effect Level (DNEL)	
Reference group	Consumer	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	89	mg/kg/d
		0.0
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
••••••		FF
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)	
	•	



Trade name: glimtrex SIGNUM 2-Pack Lacquer satin 103002

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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	1.3
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
Concentration	10	mg/kg/u
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
2-dimethylaminoethanol		
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	0,25	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	
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#### Trade name: glimtrex SIGNUM 2-Pack Lacquer satin 103002

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Concentration	1,76	mg/m³
CONCENTRALION	1,70	11g/111
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	0,43	mg/m³
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	5,28	mg/m³
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	13,53	mg/m³
		-
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Systemic effects	
Concentration	1,2	mg/kg
Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (industrial)	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	Local effects	
Concentration	0,1	mg/cm²
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	0,126	mg/kg
	- methyl-4-isothiazolin-3-one [EC no. 2 )-239-6] (3:1); reaction mass of: 5-chlo	
	thyl-4-isothiazolin-3- one [EC no. 220-	
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	0,02	mg/m³



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	Type of value	Derived No Effect Level (DNEL)	
	Reference group	Consumer	
	Duration of exposure	Long-term	
	Route of exposure	oral	
	Mode of action	Systemic effects	
	Concentration	0,09	mg/kg/d
	Concentration	0,03	ilig/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	0,02	mg/m³
			5
	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	0,04	mg/m³
		Derived No Effect Level (DNEL)	
	Type of value	Derived No Effect Level (DNEL) Consumer	
	Reference group		
	Duration of exposure	Short-term	
	Route of exposure Mode of action	Oral exposure	
	Concentration	Systemic effects 0,11	mg/kg/d
	Concentration	0,11	mg/kg/d
	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	0,04	mg/m³
Pr	redicted No Effect Concentra	ation (PNEC)	
2	-butoxyethanol		
	Type of value	PNEC	
	Туре	Freshwater	
	Concentration	8,8	mg/l
			-
	Type of value	PNEC	
	Туре	Saltwater	
	Concentration	0,88	mg/l
	Type of value	PNEC	
	Туре	saltwater sediment	
	Concentration	3,46	mg/kg
	Concentration	0,70	in Aur A
	Type of value	PNEC	
	Туре	Sewage treatment plant (STP)	



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	100	
Concentration	463	mg/l
Type of value	PNEC	
Туре	Soil	
Concentration	2,33	mg/kg
		0.0
2-(2-butoxyethoxy)ethanol		
Type of value	PNEC	
Туре	Freshwater	
Concentration	1	mg/l
	PNEC	
Type of value		
Туре	marine water	
Concentration	0,1	mg/l
Type of value	PNEC	
Туре	Fresh water sediment	
Concentration	4	mg/kg
Concernation	7	ing/ig
Type of value	PNEC	
Туре	saltwater sediment	
Concentration	0,4	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	200	mg/l
Type of value	PNEC	
Туре	Soil	
Concentration	0,4	mg/l
2-dimethylaminoethanol	PNEC	
Type of value		
Туре	Freshwater	
Concentration	0,066	mg/l
Type of value	PNEC	
Туре	Saltwater	
Concentration	0,004	mg/l
Type of value	PNEC	
Type of value		
Conditions	sporadic release	
Concentration	0,0661	mg/l
Type of value	PNEC	
Туре	Fresh water sediment	
Concentration	0,246	mg/kg
	PNEC	
Type of value		
Туре	Soil	
Concentration	0,01	mg/kg



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Туре	Sewage treatment plant (STP)	
Concentration	10	mg/l
Type of value	PNEC	
Туре	saltwater sediment	
Concentration	0,015	mg/kg
Concentration	0,010	
isothiazol-3- one [EC no. 220- [EC no. 247-500-7] and 2-metl	methyl-4-isothiazolin-3-one [EC no. 24] 239-6] (3:1); reaction mass of: 5-chloro nyl-4-isothiazolin-3- one [EC no. 220-23	-2- methyl-4-isothiazolin-3-one
Type of value	PNEC	
Туре	Marine	
Concentration	3,39	μg/l
Type of value Type Concentration	PNEC Sewage treatment plant (STP) 0,23	mg/l
Type of value	PNEC	
Туре	Freshwater sediment	
Concentration	0,027	mg/kg
	, ,	5 5
Type of value	PNEC	
Туре	Marine sediment	
Concentration	0,027	mg/kg
Type of value	PNEC	
Туре	Soil	
Concentration	0,01	mg/kg
Type of value	PNEC	
Туре	Freshwater	
Concentration	3,39	µg/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 comply Glove material	ing with El	N 374.	
Appropriate Material	butyl-	rubber	
Material thickness	>=	0,7	mm
Breakthrough time	>=	30	min
This recommendation is only for the indicated inte			oduct named in this safety data sheet supplied by us, and



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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.

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

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

Physical state	liquio				
Colour	white				
Odour	char	acteristic			
Melting point					
Remarks	not c	determined			
Freezing point					
Remarks	not c	determined			
Boiling point or initial bo	iling point	t and boil	ing rang	ge	
Value		100	to	197,6	°C
Flammability not determined					
Upper and lower explosiv	ve limits				
Remarks		determined			
Flash point					
Value	>	60			°C
Ignition temperature					
Remarks	not o	determined			
Decomposition temperat	ure				
Remarks		determined			
pH value					
Value		8			
Concentration/H2O		100			
Viscosity					
Remarks	not c	determined			
Solubility(ies)					
Remarks	not c	determined			
Partition coefficient n-oc	tanol/wate	er (log val	ue)		
Remarks	not o	determined	-		



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Vapour pressure						
Remarks	not determined					
Density and/or relative density	/					
Value	appr.	1,044			kg/l	
Temperature		20	°C			
Relative vapour density						
Remarks	not det	ermined				
Particle characteristics						
Remarks	not det	ermined				
9.2. Other information						
Odour threshold						
Remarks	not det	ermined				
Evaporation rate						
Remarks	not det	ermined				
Solubility in water						
Remarks	not det	ermined				
Efflux time						
Value		40	to	60	S	
Temperature Method		20 NISO 2431	°C			
		130 243 1	- 4 11111			
Explosive properties evaluation	not dot	ermined				
	noruer	emineu				
Oxidising properties Remarks	not dot	ermined				
Non-volatile content	noruer	emineu				
Value		35,6			%	
Method	calcula	ted value			70	
Other information						
This information is not available.						
SECTION 10: Stability and reacti	vity					
<b>10.1. Reactivity</b> Stable under recommended stor	age and	l handling o	condition	is (see sect	ion 7).	
<b>10.2. Chemical stability</b> Stable under normal conditions.						
10.3. Possibility of hazardous re	eaction	าร				

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.



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#### **10.6.** Hazardous decomposition products

Carbon monoxide and carbon dioxide, nitrous oxides (NOx), dense black smoke, No decomposition if used as prescribed.

#### **SECTION 11: Toxicological information**

11.1 Information on hazard c	lasses	s as defined in Regulatio	on (EC) No 1272/2008				
Acute oral toxicity		-					
ATE	>	10.000	mg/kg				
Method	calcul	calculated value (Regulation (EC) No. 1272/2008)					
Remarks	Based	l on available data, the classific	ation criteria are not met.				
Acute oral toxicity (Compo	nents)						
2-butoxyethanol							
ATE		1200	mg/kg				
2-dimethylaminoethanol							
Species	rat						
LD50		1183	mg/kg				
Method	OECE						
isothiazol-3- one [EC no. 220	)-239-6]		. 247-500-7] and 2-methyl-2H - loro-2- methyl-4-isothiazolin-3-one 0-239-6] (3:1) mg/kg				
1,2-benzisothiazol-3(2H)-one	)						
Species	rat						
LD50		1193	mg/kg				
Acute dermal toxicity							
ATE		8.503,98 32	mg/kg				
Method	calcul	ated value (Regulation (EC) No	. 1272/2008)				
Remarks		l on available data, the classific					
Acute dermal toxicity (Con	nponer	nts)					
2-butoxyethanol							
Species	guinea	a pig					
LD50		435	mg/kg				
Source	1 (relia	able without restriction)					
2-dimethylaminoethanol							
Species	rabbit						
LD50		1219	mg/kg				
isothiazol-3- one [EC no. 220	)-239-6	(3:1); reaction mass of: 5-ch sothiazolin-3- one [EC no. 22 50	. 247-500-7] and 2-methyl-2H - loro-2- methyl-4-isothiazolin-3-one 0-239-6] (3:1) mg/kg				
Acute inhalational toxicity							
ATE	>	20	mg/l				
Administration/Form	_ Dust/I						
Method		ated value (Regulation (EC) No	. 1272/2008)				
Remarks		I on available data, the classific					
		,					



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Acute inhalative toxicity	(Compc	onents)			
2-butoxyethanol	(	,			
Species	rat				
LC50	Tut	2,56		mg/l	
Duration of exposure		4	h		
Administration/Form	Dust/	-			
Source		iable withou	ut restrictio	n)	
2-dimethylaminoethanol	. (			· /	
Species	rat				
LC50	Tat	0,5		mg/l	
Duration of exposure		4	h	iiig/i	
Administration/Form	Dust/	/Mist			
Method		ersion value	9		
reaction mass of: 5-chlor				ne [EC no. 247-500-7] and 2-m	othyl_2H_
				s of: 5-chloro-2- methyl-4-isot	
[EC no. 247-500-7] and 2-					
ATE		0,05		mg/l	
Duration of exposure		4	h		
Administration/Form	Dust/	/Mist			
Method	conve	ersion value	Э		
Remarks	Mist				
Skin corrosion/irritation					
Method		ulation meth	nod (Regula	ation (EC) No. 1272/2008)	
Remarks				e classification criteria are not n	net.
Skin corrosion/irritation	(Compo	nents)			
2-butoxyethanol	•	,			
Species	rabbi	t			
Duration of exposure	10001	4	h		
Observation Period		28	d		
evaluation	Irritat			s membranes	
Method		84/449, B.4			
2-dimethylaminoethanol					
Species	rabbi	t			
•	o-2- meth	vl-4-isothia	azolin-3-or	ne [EC no. 247-500-7] and 2-m	ethvl-2H -
				s of: 5-chloro-2- methyl-4-isot	
[EC no. 247-500-7] and 2-					
Species	rabbi		•	- ( )	
evaluation	Seve	re skin irrita	ation		
1,2-benzisothiazol-3(2H)-	one				
evaluation		ing to skin.			
Serious eye damage/irri		÷			
Method		lation math	od (Deauly	$(EC) N_{2} = 1272/2009$	
Remarks				ation (EC) No. 1272/2008) e classification criteria are not n	not
					iei.
Serious eye damage/irri		omponen	15)		
2-butoxyethanol					
Species	rabbi		L		
Duration of exposure		24	h		
Observation Period		21	d		



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evaluation	Eye irritation	
Source	1 (reliable without restriction)	
2-(2-butoxyethoxy)ethanol	rabbit	
Species evaluation	rabbit Irritating to eyes.	
Source	2 (reliable with restrictions)	
2-dimethylaminoethanol	, , , , , , , , , , , , , , , , , , ,	
2,4,7,9-tetramethyldec-5-yne	-4.7-diol	
1,2-benzisothiazol-3(2H)-one evaluation		
Sensitization		
Method	Calculation method (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are	
Sensitization (Components	·)	
isothiazol-3- one [EC no. 220	- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and -239-6] (3:1); reaction mass of: 5-chloro-2- methyl-4 thyl-4-isothiazolin-3- one [EC no. 220-239-6] (3:1) guinea pig Causes sensitisation on guinea-pigs.	
2,4,7,9-tetramethyldec-5-yne		
evaluation	May cause sensitization by skin contact.	
1,2-benzisothiazol-3(2H)-one		
Reference substance	1,2-benzisothiazol-3(2H)-one	
evaluation	May cause sensitization by skin contact.	
Mutagenicity		
Method Remarks	Calculation method (Regulation (EC) No. 1272/2008) Based on available data, the classification criteria are	
Reproductive toxicity	שמשלע שון מימוומטוב עמנמ, נווב שמששווטמוטון שונטומ מיט	
Method	Calculation method (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are	
Carcinogenicity	,	
Method	Calculation method (Regulation (EC) No. 1272/2008)	
Remarks	Based on available data, the classification criteria are	
Specific Target Organ Toxi	city (STOT)	
Single exposure		
Method Remarks	Calculation method (Regulation (EC) No. 1272/2008) Based on available data, the classification criteria are	
<b>Repeated exposure</b> Remarks	Based on available data, the classification criteria are	not met.
Specific Target Organ Toxi	city (STOT) (Components)	
2-dimethylaminoethanol		
Specific target organ toxic	ity - single exposure	
evaluation	May cause respiratory irritation. Route of exposure inhalative Organs: Respiratory tract	



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#### Aspiration hazard

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

#### 11.2 Information on other hazards

#### Endocrine disrupting properties with respect to humans

The product does not contain a substance that has endocrine disrupting properties with respect to humans.

#### Other information

No toxicological data are available.

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

#### General information

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

#### Fish toxicity (Components)

	-239-6] (3:1); hyl-4-isothia:	reaction mass		
<b>1,2-benzisothiazol-3(2H)-one</b> Species LC50 Duration of exposure		ıs mykiss (raint h	pow trout) mg/l	
Daphnia toxicity (Compone	ents)			
	-239-6] (3:1); hyl-4-isothia:	reaction mass	• • /	
Duration of exposure	48	h		
<b>2,4,7,9-tetramethyldec-5-yne</b> Species EC50 Duration of exposure		gna (Water flea) h	) mg/l	
<b>1,2-benzisothiazol-3(2H)-one</b> Species EC50 Duration of exposure		gna (Water flea) h	) mg/l	
Algae toxicity (Component	s)			
reaction mass of: 5-chloro-2	- methyl-4-iso -239-6] (3:1); :hyl-4-isothia:	reaction mass zolin-3- one [E is capricornutur	e [EC no. 247-500-7] and 2-meth of: 5-chloro-2- methyl-4-isothia C no. 220-239-6] (3:1) m (fresh water algae) mg/l	

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#### **Bacteria toxicity (Components)** reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H isothiazol-3- one [EC no. 220-239-6] (3:1); reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3- one [EC no. 220-239-6] (3:1) activated sludge Species **EC50** 4.5 mg/l 12.2. Persistence and degradability **General information** For this subsection there is no ecotoxicological data available on the product as such. **Biodegradability (Components)** reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H isothiazol-3- one [EC no. 220-239-6] (3:1); reaction mass of: 5-chloro-2- methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3- one [EC no. 220-239-6] (3:1) evaluation Not readily biodegradable. 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 (log value) Remarks not determined 12.4. Mobility in soil **General information** For this subsection there is no ecotoxicological data available on the product as such. Mobility in soil no data available 12.5. Results of PBT and vPvB assessment General information For this subsection there is no ecotoxicological data available on the product as such. Results of PBT and vPvB assessment The product contains no PBT substances The product contains no vPvB substances. 12.6 Endocrine disrupting properties Endocrine disrupting properties with respect to the envrionment The product does not contain a substance that has endocrine disrupting properties with respect to nontarget organisms. 12.7. Other adverse effects **General information** For this subsection there is no ecotoxicological data available on the product as such. General information / ecology For this subsection there is no ecotoxicological data available on the product as such.



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CECTION 42. Dispessel considerat	:
SECTION 13: Disposal considerat	lons
13.1. Waste treatment methods	
Disposal recommendations for	the product
EWC waste code EWC waste code Where possible recycling is prefer Do not allow to enter drains or wa	•
modified product	
EWC waste code	070304 - other organic solvents, washing liquids and mother liquors
Disposal recommendations for	packaging
EWC waste code	150110 - packaging containing residues of or contaminated by dangerous substances
Germany: KBS system for sheet of Completely emptied packagings of	•

## **SECTION 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.

## **SECTION 15: Regulatory information**

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

Water Hazard Class (Ge	rmany)					
Water Hazard Class	WGK 1					
(Germany)						
Remarks	Derivation	of WGK	acco	rding to A	nnex 1 No. 5.2 Av	vSV
VOC						
VOC (EU)	7,2	2	%	75	g/l	
<b>15.2. Chemical safety asse</b> For this substance / mixtu		afety as	ssessr	nent was	not carried out.	
SECTION 16: Other informa Hazard statements listed		3				

Flammable liquid and vapour.
Toxic if swallowed.
Harmful if swallowed.
Fatal in contact with skin.
Harmful in contact with skin.
Causes severe skin burns and eye damage.



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H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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

Acute Tox. 2	Acute toxicity, Category 2
Acute Tox. 3	Acute toxicity, Category 3
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Dam. 1	Serious eye damage, Category 1
Eye Irrit. 2	Eye irritation, Category 2
Flam. Liq. 3	Flammable liquid, Category 3
Skin Corr. 1B	Skin corrosion, Category 1B
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1B	Skin sensitization, Category 1B
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.



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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

ES005 - 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

Maximum amount used per time or activity

liquid

Emission days per site:

300

#### Other relevant operational conditions

Use: Room temperature

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

Where possible recycling is preferred to disposal or incineration.

Do not allow to enter soil, waterways or waste water canal.

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

#### Waste water

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

<=

#### Exhaust air

Keep container closed. Avoid release to the environment.

#### Soil

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

#### Disposal recommendations for the product

EWC waste code

140603 - other solvents and solvent mixtures

200113 - solvents

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



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#### modified product

EWC waste code

070304 - other organic solvents, washing liquids and mother liquors

#### Disposal recommendations for packaging

EWC waste code

150110 - packaging containing residues of or contaminated by dangerous substances

Germany: KBS system for sheet covering 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.

0	 5		-
Glove material			
Appropriate Material		butyl-ı	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.



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#### **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

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

SU

SU3 PROC7 inhalation, long-term - systemic 42 mg/m<sup>3</sup> ESIG GES tool 0,428571 2-butoxyethanol

PROC7 dermal, long-term - systemic 8,5714 mg/kg/d ESIG GES tool 0,068571 2-butoxyethanol

PROC10 inhalation, long-term - systemic 55 mg/m<sup>3</sup> EASY TRA v3.5 0,561224 2-butoxyethanol

PROC10 dermal, long-term - systemic 5,4857 mg/kg/d ESIG GES tool 0,043886 2-butoxyethanol

PROC13 inhalation, long-term - systemic 49,2393 mg/m<sup>3</sup> ESIG GES tool 0,502441 2-butoxyethanol

PROC13 dermal, long-term - systemic 2,7429 mg/kg/d EASY TRA v3.5 0,021943 2-butoxyethanol

SU3



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PROC Assessment method Exposure assessment Risk characterisation ratio (RCR) Lead substance Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

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

#### Workers (industrial)

SU PROC Assessment method Exposure assessment Risk characterisation ratio (RCR) Lead substance PROC7 inhalation, long-term - local and systemic 7 ppm 0,7 2-(2-butoxyethoxy)ethanol

SU3 PROC7 dermal, long-term - systemic 2,14 mg/kg/d 0,11 2-(2-butoxyethoxy)ethanol

SU3 PROC10 inhalation, long-term - local and systemic 0,5 ppm 0,05 2-(2-butoxyethoxy)ethanol

SU3 PROC10 dermal, long-term - systemic 5,49 mg/kg/d 0,27 2-(2-butoxyethoxy)ethanol

SU3 PROC13 inhalation, long-term - local and systemic 2 ppm 0,2 2-(2-butoxyethoxy)ethanol

SU3 PROC13 dermal, long-term - systemic 0,69 mg/kg/d 0,034 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



Version: 53 / DE

Replaces Version: 52 / DE

Revision: 28.11.2022 Print date: 07.09.23

ES008 - Professional uses: roller application or brushing, dipping and pouring and other processing without aerosol formation (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
PROCh01	Other processing without aerosol formation
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring

# Contributing exposure scenario controlling environmental exposure

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

# Maximum amount used per time or activity

Emission days per site:

<= 250

#### Other relevant operational conditions

Use: Room temperature

Drying and through-curing takes place at ambient temperature or at higher temperatures. Volatile organic substances will volatilise into the atmospheric air inside. Where possible recycling is preferred to disposal or incineration.

Do not allow to enter soil, waterways or waste water canal.

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

#### Waste water

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

#### 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	140603 - other solvents and solvent mixtures
	200113 - solvents

Where possible recycling is preferred to disposal or incineration.

Do not allow to enter drains or waterways.

#### modified product

EWC waste code

070304 - other organic solvents, washing liquids and mother liquors

#### **Disposal recommendations for packaging**

EWC waste code

150110 - packaging containing residues of or contaminated by dangerous substances

Germany: KBS system for sheet covering



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Replaces Version: 52 / DE

Revision: 28.11.2022 Print date: 07.09.23

# Contributing exposure scenario controlling worker exposure (professional)

#### Short title of the exposure scenario

Substance number:CES016

Use

SU22	Professional uses: Public domain (administration, education, entertainment,
	services, craftsmen)
PROCh01	Other processing without aerosol formation
PROC10	Roller application or brushing
PROC13	Treatment of articles by dipping and pouring
Physical form	liquid

#### Maximum amount used per time or activity

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

#### Other relevant operational conditions

Use: Room temperature

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

ppropriate Material butyl-rubbe		ıbber
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



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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 PROC

Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU

SU22 PROC10 inhalation, long-term - systemic Indoor use 36,9294 mg/m<sup>3</sup> ESIG GES tool 0,376831 2-butoxyethanol

SU22 PROC10 dermal, long-term - systemic Indoor use 5,4857 mg/kg/d ESIG GES tool 0,043887 2-butoxyethanol

SU22 PROC10 inhalation, long-term - systemic Outdoor use 51,7012 ppm ECETOC TRA 0,527563 2-butoxyethanol

SU22 PROC10 dermal, long-term - systemic Outdoor use 3,2914 mg/kg/d ECETOC TRA 0,026331 2-butoxyethanol

SU22 PROC11 inhalation, long-term - systemic Indoor use 62 mg/m<sup>3</sup> ESIG GES tool 0,632653 2-butoxyethanol

SU22

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PROC Assessment method

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

Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

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

Workers (professional)

SU PROC Assessment method

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

PROC11 dermal, long-term - systemic Indoor use 12.8571 mg/kg/d ESIG GES tool 0,632653 2-butoxyethanol SU22 PROC11 inhalation, long-term - systemic Outdoor use 10 ppm ECETOC TRA 0.5 2-butoxyethanol **SU22** PROC11 dermal, long-term - systemic Outdoor use 21 mg/kg/d ECETOC TRA 0.286 2-butoxyethanol SU22 PROC13 inhalation, long-term - systemic Indoor use 49,2393 mg/m<sup>3</sup> ESIG GES tool 0.502441 2-butoxyethanol SU22 PROC13 dermal, long-term - systemic Indoor use 2,7429 mg/kg/d ESIG GES tool 0.021943 2-butoxyethanol SU22

PROC13 inhalation, long-term - systemic Outdoor use 7 ppm ESIG GES tool 0,35



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#### Lead substance Workers (professional) SU

PROC Assessment method

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

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

# Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance 2-butoxyethanol

SU22 PROC13 dermal, long-term - systemic Outdoor use 14 mg/kg/d ESIG GES tool 0,183 2-butoxyethanol

SU22 PROC10 inhalation, long-term - local and systemic Outdoor use 2,5 ppm 0,25 2-(2-butoxyethoxy)ethanol

SU22 PROC10 dermal, long-term - systemic Outdoor use 2,74 mg/kg/d 0,137 2-(2-butoxyethoxy)ethanol

SU22 PROC10 inhalation, long-term - local and systemic Indoor use 1,25 ppm 0,125 2-(2-butoxyethoxy)ethanol

SU22 PROC10 dermal, long-term - systemic Indoor use 0,55 mg/kg/d 0,027 2-(2-butoxyethoxy)ethanol

SU22 PROC11 inhalation, long-term - local and systemic Indoor use 5 ppm 0,5 2-(2-butoxyethoxy)ethanol



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Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

#### Workers (professional)

SU PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance

# Workers (professional)

SU

SU22 PROC11 dermal, long-term - systemic Indoor use 2,14 mg/kg/d 0,107 2-(2-butoxyethoxy)ethanol SU22 PROC11

PROC11 inhalation, long-term - local and systemic Outdoor use 4,2 ppm 0,42 2-(2-butoxyethoxy)ethanol

SU22 PROC11 dermal, long-term - systemic Outdoor use 1,29 mg/kg/d 0,42 2-(2-butoxyethoxy)ethanol

SU22 PROC13 inhalation, long-term - local and systemic Indoor use 2 ppm 0,2 2-(2-butoxyethoxy)ethanol

SU22 PROC13 dermal, long-term - systemic Indoor use 0,69 mg/kg/d 0,034 2-(2-butoxyethoxy)ethanol

SU22 PROC13 inhalation, long-term - local and systemic Outdoor use 4,2 ppm 0,42 2-(2-butoxyethoxy)ethanol

**SU22** 





Trade name: glimtrex SIGNUM 2-Pack Lacquer satin 103002

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Replaces Version: 52 / DE

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PROC Assessment method

Exposure assessment Risk characterisation ratio (RCR) Lead substance PROC13 dermal, long-term - systemic Outdoor use 0,41 mg/kg/d 0,42 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

ES010 - Private households (= general public = consumers): roller application or brushing, dipping and pouring, non industrial spraying and other processing without aerosol formation (inside)

#### Use of the substance/preparation

Surface treatment of wood and other materials

Use

SU21	Consumer uses: Private households (= general public = consumers)
ERC8a	Wide dispersive indoor use of processing aids in open systems
ERC8c	Wide dispersive indoor use resulting in inclusion into or onto a matrix
PROCh01	Other processing without aerosol formation
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring

# 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:

20

#### Other relevant operational conditions

Use: Room temperature

Adhere to the recommended processing temperature.

Volatile organic substances will volatilise into the atmospheric air inside.

Do not allow to enter soil, waterways or waste water canal.

#### 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



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Floors should be impervious, resistant to liquids and easy to clean. Protect floor with suitable covering plastic film / paper.

#### Disposal recommendations for the product

EWC waste code

140603 - other solvents and solvent mixtures 200113 - solvents

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

#### modified product

EWC waste code

070304 - other organic solvents, washing liquids and mother liquors

#### Disposal recommendations for packaging

EWC waste code

150110 - packaging containing residues of or contaminated by dangerous substances

Germany: KBS system for sheet covering Completely emptied packagings can be given for recycling.

## Contributing exposure scenario controlling consumer exposure

Use

SU21	Consumer uses: Private households (= general public = consumers)			
PROCh01	Other processing without aerosol formation			
PROC10	Roller application or brushing			
PROC11	Non industrial spraying			
PROC13	Treatment of articles by dipping and pouring			
Physical form	liquid			
Maximum amount used per time or activity				

#### Maximum amount used per time or activity

Duration of exposure	<=	4	h/d
Frequency of exposure	<=	20	d/a

#### Other relevant operational conditions

Use: Room temperature

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

Adhere to the recommended processing temperature.

Volatile organic substances will volatilise into the atmospheric air inside.

#### Product substance and product safety related measures

Keep out of reach of children. Keep away from food, drink and animal feedingstuffs. Do no eat, drink or smoke when using this product.

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 Protective gloves complying with EN 374.

Glove material

Appropriate Material butyl-rubber

- Material thickness >= 0,7 Breakthrough time >= 30
- 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.



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

Wear eye glasses with side protection according to EN 166.

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

# 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.