

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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

1.1. Product identifier

glimtrex SIGNUM 1-Pack Lacquer satin 103001

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

SU22	REACHSET 2003 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
PROC10	Roller application or brushing

1.3. Details of the supplier of the safety data sheet

Producer

glimtrex GmbH
Orkotten 68
48291 Telgte
Telephone no. +49 (0) 2504 88887-111
Fax no. +49 (0) 2504 88887-112
E-mail address info@glimtrex.de

1.4. Emergency telephone number

Germany: +49 (0) 30 19240

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, 3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone, 2,4,7,9-tetramethyldec-5-yne-4,7-diol, May produce an allergic reaction.

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

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).

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

3. Composition/information on ingredients

Hazardous ingredients (Regulation (EC) No. 1272/2008)

2-(2-butoxyethoxy)ethanol

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

Classification (Regulation (EC) No. 1272/2008)
 Eye Irrit. 2 H319

2-butoxyethanol

CAS No.	111-76-2				
EINECS no.	203-905-0				
Registration no.	01-2119475108-36				
Concentration	>= 1	<	4		%

Classification (Regulation (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 exposure
Eye Irrit. 2	H315	
Skin Irrit. 2	H319	

2-dimethylaminoethanol

CAS No.	108-01-0				
EINECS no.	203-542-8				
Registration no.	01-2119492298-24				
Concentration	>= 0,1	<	1		%

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

Flam. Liq. 3	H226	
Acute Tox. 3	H331	Route of exposure: Inhalation exposure
Acute Tox. 4	H312	Route of exposure: Dermal exposure
Acute Tox. 4	H302	Route of exposure: Oral exposure
Skin Corr. 1B	H314	
STOT SE 3	H335	Respiratory tract

Concentration limits (Regulation (EC) No. 1272/2008)
 STOT SE 3 H335 >= 5

2,4,7,9-tetramethyldec-5-yne-4,7-diol

CAS No.	126-86-3				
EINECS no.	204-809-1				
Registration no.	01-2119954390-39				
Concentration	>= 0,1	<	1		%

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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

Eye Dam. 1	H318
Skin Sens. 1B	H317
Aquatic Chronic 3	H412

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 $\geq 0,05$ %**3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone**

CAS No. 55965-84-9

EINECS no. 247-500-7

Concentration < 0,0015 %

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

Acute Tox. 3	H331
Acute Tox. 3	H311
Acute Tox. 3	H301
Skin Corr. 1B	H314
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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

Skin Corr. 1B H314 $\geq 0,6$ %
 Skin Irrit. 2 H315 $\geq 0,06 \leq 0,6$ %
 Eye Irrit. 2 H319 $\geq 0,06 < 0,6$ %
 Skin Sens. 1 H317 $\geq 0,0015$ %

Further hazardous ingredients

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

4. First aid measures**4.1. Description of first aid measures****General information**

Move out of dangerous area. When symptoms persist or in all cases of doubt seek medical advice. Get medical advice/ attention if you feel unwell. First aider needs to protect himself.

After inhalation

In the case of inhalation of aerosol/mist consult a physician if necessary.

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

After skin contact

Wash off immediately with soap and plenty of water. Do NOT use solvents or thinners. If skin irritation persists, call a physician.

After eye contact

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

After ingestion

Do NOT induce vomiting. Consult a physician.

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. The liquid splashed in the eyes may cause irritation and reversible damage.

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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Wear self contained breathing apparatus for fire fighting if necessary.

Other information

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

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, mist or gas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Contact the proper local authorities.

6.3. Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated floors and objects thoroughly while observing

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

environmental regulations. Clean with detergents. Avoid solvents. Keep in suitable, closed containers for 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 containers tightly closed in a dry, cool and well-ventilated place. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. When using, do not eat, drink or smoke. Use personal protective equipment. For personal protection see section 8.

Advice on protection against fire and explosion

Standard procedure for chemical fires.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store at room temperature in the original container. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on storage assembly

Keep away from oxidising agents and strongly acid or alkaline materials.

Storage class according to the Occupation Safety Ordinance:

Exempt

Further information on storage conditions

Keep away from heat. Protect from sunlight. Protect from frost - <10%, for a solvent content (see section 15 VOC). 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-butoxyethanol

List	TRGS 900		
Value	49	mg/m ³	10 ppm(V)
Maximum limit value: 4(II); Skin resorption / sensibilisation: H: Y; Status: 11/2015			

2-butoxyethanol

List	Directive 2000/39 EG		
Value	98	mg/m ³	20 ppm(V)
Short term exposure limit	246	mg/m ³	50 ppm(V)
Skin resorption / sensibilisation: H; Status: 12/2009			

2-(2-butoxyethoxy)ethanol

List	TRGS 900		
Value	67	mg/m ³	10 ppm(V)
Maximum limit value: 1,5(I); Pregnancy group: Y; Status: 11/2015			

2-(2-butoxyethoxy)ethanol

List	Directive 2000/39 EG		
Value	67,5	mg/m ³	10 ppm(V)

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Short term exposure limit 101,2 mg/m³ 15 ppm(V)
 Status: 12/2009

2-(2-ethoxyethoxy)ethanol

List TRGS 900
 Value 35 mg/m³ 6 ppm(V)
 Maximum limit value: 2(l); Pregnancy group: Y; Status: 11/2015

(2-methoxymethylethoxy)propanol

List TRGS 900
 Value 310 mg/m³ 50 ppm(V)
 Maximum limit value: 1(l); Status: 11/2015

(2-methoxymethylethoxy)propanol

List Directive 2000/39 EG
 Value 308 mg/m³ 50 ppm(V)
 Status: 12/2009

Other information

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Derived No/Minimal Effect Levels (DNEL/DMEL)

2-butoxyethanol

Type of value DNEL
 Reference group Workers (professional)
 Duration of exposure Long-term
 Route of exposure Dermal exposure
 Mode of action Acute effects
 Concentration 89 mg/kg

Type of value DNEL
 Reference group Workers (industrial)
 Duration of exposure Long-term
 Route of exposure inhalative
 Mode of action Chronic effects
 Concentration 98 mg/m³

Type of value DNEL
 Reference group Workers (professional)
 Duration of exposure Long-term
 Route of exposure inhalative
 Mode of action Local effects
 Concentration 246 mg/m³

Type of value DNEL
 Reference group Workers (professional)
 Duration of exposure Long-term
 Route of exposure Dermal exposure
 Mode of action systemic effect
 Concentration 75 mg/kg/d

Type of value DNEL
 Reference group Workers (professional)
 Duration of exposure Long-term
 Route of exposure inhalative
 Mode of action systemic effect

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Concentration	20	ppm
Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	44,5	mg/kg/d
Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	426	mg/m ³
Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	systemic effect	
Concentration	3,2	mg/kg/d
Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	Oral exposure	
Mode of action	systemic effect	
Concentration	13,4	mg/kg/d
Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	123	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	Acute effects	
Concentration	44,5	mg/kg
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Acute effects	
Concentration	426	mg/m ³
Type of value	DNEL	
Reference group	Consumers	

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	Acute effects	
Concentration	13,4	mg/kg
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	106,4	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	38	mg/kg
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	20	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	49	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Short-term	
Route of exposure	Oral exposure	
Mode of action	Chronic effects	
Concentration	3,2	mg/kg
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	135	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	123	mg/m ³

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Short-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	89	mg/kg/d

(2-methoxymethylethoxy)propanol

Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	65	mg/kg/d

Type of value	DNEL	
Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	310	mg/m ³

Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	15	mg/kg/d

Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	37,2	mg/m ³

Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	systemic effect	
Concentration	1,67	mg/kg/d

2-(2-ethoxyethoxy)ethanol

Type of value	DNEL	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	50	mg/kg/d

Type of value	DNEL	
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Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	37	mg/m ³
Type of value	DNEL	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	18	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	25	mg/kg/d
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	18,3	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	systemic effect	
Concentration	25	mg/kg/d
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	9	mg/m ³
2-(2-butoxyethoxy)ethanol		
Type of value	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	DNEL	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Mode of action	systemic effect	
Concentration	20	mg/kg/d
Type of value	DNEL	
Reference group	Workers (industrial)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	10	ppm
Type of value	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	DNEL	
Reference group	Consumers	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	7,5	mg/m ³
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Dermal exposure	
Mode of action	systemic effect	
Concentration	10	mg/kg/d
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	systemic effect	
Concentration	5	mg/kg/d
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	Oral exposure	
Mode of action	systemic effect	
Concentration	1,3	mg/kg/d
Type of value	DNEL	
Reference group	Consumers	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	5	mg/m ³

Predicted No Effect Concentration (PNEC)

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

2-butoxyethanol

Type of value	PNEC	
Type	freshwater	
Concentration	8,8	mg/l
Type of value	PNEC	
Type	saltwater	
Concentration	0,88	mg/l
Type of value	PNEC	
Type	saltwater sediment	
Concentration	3,46	mg/kg
Type of value	PNEC	
Type	sewage treatment plants (STP)	
Concentration	463	mg/l
Type of value	PNEC	
Type	ground	
Concentration	3,13	mg/kg

(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 plants (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	ground	
Concentration	2,74	mg/kg

2-(2-ethoxyethoxy)ethanol

Type of value	PNEC	
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Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Type	freshwater	
Concentration	0,74	mg/l
Type of value	PNEC	
Type	Marine water	
Concentration	0,074	mg/l
Type of value	PNEC	
Type	sewage treatment plants (STP)	
Concentration	500	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	2,74	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	274	mg/kg
Type of value	PNEC	
Type	ground	
Concentration	0,15	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 plants (STP)	
Concentration	200	mg/l
Type of value	PNEC	
Type	ground	
Concentration	0,4	mg/l

8.2. Exposure controls**Exposure controls**

Apply technical measures to comply with the workplace exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

not sufficient to maintain concentrations of particulates and solvent vapour below the WEL, suitable respiratory protection must be worn.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Recommended Filter type: Combination filter: A2-P2 (EN 141, 143, 371)

Skin protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material Fluorinated rubber / butyl-rubber

This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye/face protection

Safety glasses with side-shields conforming to EN166

Individual protection measures

Wear suitable protective clothing. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid
Colour	milky
Odour	characteristic
Odour threshold	
Remarks	no data available
pH value	
Remarks	no data available
Melting point	
Remarks	no data available
Freezing point	
Remarks	no data available
Initial boiling point and boiling range	
Value	100 to 202 °C
Flash point	
Value	> 60 °C
Flammability (solid, gas)	
Remarks	no data available
Upper/lower flammability or explosive limits	
Remarks	no data available
Vapour density	
Remarks	no data available

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Density

Value	1			g/cm ³
Temperature	20	°C		

Solubility in water

Remarks no data available

Solubility(ies)

Remarks no data available

Partition coefficient: n-octanol/water

Remarks no data available

Ignition temperature

Remarks no data available

Decomposition temperature

Remarks no data available

Viscosity

Remarks no data available

Efflux time

Value	40	to	60	s
Temperature	20	°C		
Method	DIN EN ISO 2431 - 4 mm			

Explosive properties

evaluation no data available

Oxidising properties

Remarks no data available

10. Stability and reactivity**10.1. Reactivity**

No conditions to be specially mentioned.

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

Heat, flames and sparks.

Decomposition temperature

Remarks no data available

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 productsCarbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke. No decomposition if stored and applied as directed.

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

11. Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

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

Acute oral toxicity (Components)

2-butoxyethanol

Species	rat		
LD50	1746		mg/kg

Acute dermal toxicity

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

Acute dermal toxicity (Components)

2-butoxyethanol

Species	guinea pig		
ATE	1100		mg/kg

Acute inhalational toxicity

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

Acute inhalative toxicity (Components)

2-butoxyethanol

Species	rat		
ATE	1,5		mg/l
Duration of exposure	4	h	
Administration/Form	Dust/Mist		
Method	conversion value		
Remarks	Mist		

Skin corrosion/irritation

Remarks	Based on available data, the classification criteria are not met.
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Serious eye damage/irritation

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

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

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

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

Remarks	Based on available data, the classification criteria are not met.
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Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Specific Target Organ Toxicity (STOT)

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

Aspiration hazard

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

Other information

No data is available on the product itself.

12. Ecological information

12.1. Toxicity

General information

No data is available on the product itself.

Fish toxicity (Components)

2-(2-ethoxyethoxy)ethanol

LC50	6010		mg/l
Duration of exposure	96	h	

12.2. Persistence and degradability

General information

No data is available on the product itself.

12.3. Bioaccumulative potential

General information

No data is available on the product itself.

Partition coefficient: n-octanol/water

Remarks no data available

12.4. Mobility in soil

General information

No data is available on the product itself.

Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

General information

Not applicable

12.6. Other adverse effects

General information

No data is available on the product itself.

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
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Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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

Where possible recycling is preferred to disposal or incineration.

Try to prevent the material from entering drains or water courses.

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

Empty remaining contents.

Empty containers should be taken to local recyclers for disposal.

Germany: KBS system for sheet covering

14. Transport information**Land transport ADR/RID**

Not classified as dangerous in the meaning of transport regulations.

Marine transport IMDG/GGVSee

Not classified as dangerous in the meaning of sea and air transport regulations.

Air transport ICAO/IATA

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****Water Hazard Class (Germany)**

Water Hazard Class (Germany)	WGK 1
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VOC

VOC (EU)	7,4	%	78	g/l
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Non-volatile content

Value [%]	38,3
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16. Other information**Hazard statements listed in Chapter 3**

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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. 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 3	Hazardous to the aquatic environment, chronic, Category 3
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
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 Sens. 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 the International Transport of Dangerous Goods by Rail)

IMDG - International Maritime Code for Dangerous Goods

IATA - International Air Transport Association

IATA-DGR - Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO-TI - Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS - Globally Harmonized System of Classification and Labelling of Chemicals

EINECS - European Inventory of Existing Commercial Chemical Substances

CAS - Chemical Abstracts Service (division of the American Chemical Society)

GefStoffV - Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL - Lowest Observed Adverse Effect Level

LOEL - Lowest Observed Effect Level

NOAEL - No Observed Adverse Effect Level

NOEC - No Observed Effect Concentration

NOEL - No Observed Effect Level

OECD - Organisation for Economic Cooperation and Development

VOC - Volatile Organic Compounds

Changes since the last version are highlighted in the margin (**). This version replaces all previous versions.

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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

ES020 - 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
PROC13	Treatment of articles by dipping and pouring
PROC10	Roller application or brushing

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

Hazardous ingredients

2-(2-butoxyethoxy)ethanol

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

2-butoxyethanol

CAS No.	111-76-2
EINECS no.	203-905-0
Registration no.	01-2119475108-36
Concentration	>= 1 < 4 %

2-dimethylaminoethanol

CAS No.	108-01-0
EINECS no.	203-542-8
Registration no.	01-2119492298-24
Concentration	>= 0,1 < 1 %

2,4,7,9-tetramethyldec-5-yne-4,7-diol

CAS No.	126-86-3
EINECS no.	204-809-1
Registration no.	01-2119954390-39
Concentration	>= 0,1 < 1 %

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

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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

3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone

CAS No.	55965-84-9		
EINECS no.	247-500-7		
Concentration		<	0,0015 %

Maximum amount used per time or activity

Emission days per site:		<=	250
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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.
 The product should not be allowed to enter drains, water courses or the soil.
 Dispose of rinse water in accordance with local and national regulations.

Waste water

Do not flush into surface water or sanitary sewer system.

Exhaust air

Keep container closed. Discharge into the environment must be avoided.

Soil

Use only in an area equipped with an impervious floor.

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.
 Try to prevent the material from entering drains or water courses.

modified product

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

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

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

Empty remaining contents.
 Empty containers should be taken to local recyclers for disposal.
 Germany: KBS system for sheet covering

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

SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
PROCh01	Other processing without aerosol formation

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

PROC10 Roller application or brushing
 PROC13 Treatment of articles by dipping and pouring
Physical form liquid

Hazardous ingredients**2-(2-butoxyethoxy)ethanol**

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

2-butoxyethanol

CAS No. 111-76-2
 EINECS no. 203-905-0
 Registration no. 01-2119475108-36
 Concentration >= 1 < 4 %

2-dimethylaminoethanol

CAS No. 108-01-0
 EINECS no. 203-542-8
 Registration no. 01-2119492298-24
 Concentration >= 0,1 < 1 %

2,4,7,9-tetramethyldec-5-yne-4,7-diol

CAS No. 126-86-3
 EINECS no. 204-809-1
 Registration no. 01-2119954390-39
 Concentration >= 0,1 < 1 %

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

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

3(2H)-Isothiazolone, 5-chloro-2-methyl-, mixt. with 2-methyl-3(2H)-isothiazolone

CAS No. 55965-84-9
 EINECS no. 247-500-7
 Concentration < 0,0015 %

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. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Recommended Filter type: Combination filter: A2-P2 (EN 141, 143, 371)

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Skin protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material Fluorinated rubber / butyl-rubber

This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye/face protection

Safety glasses with side-shields conforming to EN166

Individual protection measures

Wear suitable protective clothing. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

Exposure estimation and reference to its source

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - systemic
	Indoor use
Exposure assessment	7,5 ppm
Exposure assessment (method)	ESIG GES tool
Risk characterisation ratio (RCR)	0,4
Lead substance	2-butoxyethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	2,74 mg/kg/d
Exposure assessment (method)	ESIG GES tool
Risk characterisation ratio (RCR)	0,0
Lead substance	2-butoxyethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	inhalation, long-term - systemic
	Outdoor use
Exposure assessment	12,25 ppm
Exposure assessment (method)	ECETOC TRA
Risk characterisation ratio (RCR)	0,6
Lead substance	2-butoxyethanol

Workers (professional)

SU	SU22
PROC	PROC10
Assessment method	dermal, long-term - systemic
	Outdoor use

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

Exposure assessment	2,74	mg/kg/d
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,0	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	
PROC	PROC11	
Assessment method	inhalation, long-term - systemic Indoor use	
Exposure assessment	4	ppm
Exposure assessment (method)	ESIG GES tool	
Risk characterisation ratio (RCR)	0,2	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	
PROC	PROC11	
Assessment method	dermal, long-term - systemic Indoor use	
Exposure assessment	0,43	mg/kg/d
Exposure assessment (method)	ESIG GES tool	
Risk characterisation ratio (RCR)	0,0	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	
PROC	PROC11	
Assessment method	inhalation, long-term - systemic Outdoor use	
Exposure assessment	4,9	ppm
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,2	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	
PROC	PROC11	
Assessment method	dermal, long-term - systemic Outdoor use	
Exposure assessment	2,14	mg/kg/d
Exposure assessment (method)	ECETOC TRA	
Risk characterisation ratio (RCR)	0,0	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	
PROC	PROC13	
Assessment method	inhalation, long-term - systemic Indoor use	
Exposure assessment	10	ppm
Exposure assessment (method)	ESIG GES tool	
Risk characterisation ratio (RCR)	0,5	
Lead substance	2-butoxyethanol	
Workers (professional)		
SU	SU22	

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

PROC	PROC13
Assessment method	dermal, long-term - systemic
	Indoor use
Exposure assessment	13,71 mg/kg/d
Exposure assessment (method)	ESIG GES tool
Risk characterisation ratio (RCR)	0,2
Lead substance	2-butoxyethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	inhalation, long-term - systemic
	Outdoor use
Exposure assessment	4,9 ppm
Exposure assessment (method)	ESIG GES tool
Risk characterisation ratio (RCR)	0,2
Lead substance	2-butoxyethanol

Workers (professional)

SU	SU22
PROC	PROC13
Assessment method	dermal, long-term - systemic
	Outdoor use
Exposure assessment	1,37 mg/kg/d
Exposure assessment (method)	ESIG GES tool
Risk characterisation ratio (RCR)	0,0
Lead substance	2-butoxyethanol

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
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Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

PROC	PROC10
Assessment method	dermal, long-term - systemic
Exposure assessment	Indoor use
Risk characterisation ratio (RCR)	0,55 mg/kg/d
Lead substance	0,027
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	Indoor use
Risk characterisation ratio (RCR)	5 ppm
Lead substance	0,5
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic
Exposure assessment	Indoor use
Risk characterisation ratio (RCR)	2,14 mg/kg/d
Lead substance	0,107
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC11
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	Outdoor use
Risk characterisation ratio (RCR)	4,2 ppm
Lead substance	0,42
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC11
Assessment method	dermal, long-term - systemic
Exposure assessment	Outdoor use
Risk characterisation ratio (RCR)	1,29 mg/kg/d
Lead substance	0,42
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC13
Assessment method	inhalation, long-term - local and systemic
Exposure assessment	Indoor use
Risk characterisation ratio (RCR)	2 ppm
Lead substance	0,2
	2-(2-butoxyethoxy)ethanol
Workers (professional)	
SU	SU22
PROC	PROC13
Assessment method	dermal, long-term - systemic
	Indoor use

Trade name: glimtrex SIGNUM 1-Pack Lacquer satin 103001

Version: 15 / DE

Date created/revised: 18.02.2016

Replaces Version: 14 / DE

Print date: 19.07.16

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.