

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

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

1.1. Product identifier

glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

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

1.3. Details of the supplier of the safety data sheet

Manufacturer

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 30686700

2. Hazards identification

2.1. Classification of the substance or mixture

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

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

Flam. Liq. 3 H226

Acute Tox. 4 H332

Skin Sens. 1 H317

STOT SE 3 H335

Aquatic Chronic 3 H412

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008

For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

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

contains hexamethylene diisocyanate, oligomers; Hexamethylene-di-isocyanate

Supplemental information

EUH204 Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

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

3. Composition/information on ingredients**Hazardous ingredients****hexamethylene diisocyanate, oligomers**

CAS No.	28182-81-2			
EINECS no.	500-060-2			
Registration no.	01-2119485796-17			
Concentration	>= 30	<	50	%
Classification (Regulation (EC) No. 1272/2008)				
	Aquatic Chronic 3		H412	
	Skin Sens. 1		H317	
	Acute Tox. 4		H332	Route of exposure: Inhalation
				exposure
	STOT SE 3		H335	Respiratory tract

Benzene, 1,3-diisocyanatomethyl-, polymer with 1,6-diisocyanatohexane, polyethylene glycol mono-Me ether-blocked

CAS No.	1160001-30-8			
Concentration	>= 10	<	25	%
Classification (Regulation (EC) No. 1272/2008)				
	Aquatic Chronic 3		H412	

Hexamethylene-di-isocyanate

CAS No.	822-06-0			
EINECS no.	212-485-8			
Registration no.	01-2119457571-37			
Concentration		<	0,1	%
Classification (Regulation (EC) No. 1272/2008)				
	Acute Tox. 4		H302	Route of exposure: Oral exposure
	Acute Tox. 1		H330	Route of exposure: Inhalation
				exposure
	Eye Irrit. 2		H319	

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

STOT SE 3	H335
Skin Irrit. 2	H315
Resp. Sens. 1	H334
Skin Sens. 1	H317

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

Resp. Sens. 1	H334	>= 0,5 %
Skin Sens. 1	H317	>= 0,5 %

Note

For explanation of abbreviations see section 16.

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

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

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. Based on the properties of the isocyanate components and considering toxicological data on similar mixtures, this mixture may cause acute irritation and/or sensitisation of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest.

4.3. Indication of any immediate medical attention and special treatment needed**Hints for the physician / treatment**

Treat symptomatically.

5. Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Recommended: alcohol resistant foam, CO₂, powders, water spray/mist

Non suitable extinguishing media

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

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

5.2. Special hazards arising from the substance or mixture

Vapours can form an explosive mixture with air.

5.3. Advice for firefighters

Other information

Standard procedure for chemical fires.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour 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. Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be exposed to any process in which this mixture is used. Avoid contact with skin and eyes. Avoid inhalation of vapour and spray mist. Do not eat, drink or smoke when using this product. Use personal protective clothing. For personal protection see Section 8.

Advice on protection against fire and explosion

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

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

leakage.

Hints on storage assembly

Keep away from oxidising agents, strongly alkaline and strongly acid materials, amines, alcohols and water.

Storage classes

Storage class according to TRGS 510 3 Flammable liquid

Further information on storage conditions

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

7.3. Specific end use(s)

See exposure scenario, if available.

8. Exposure controls/personal protection

8.1. Control parameters

Other information

-

Derived No/Minimal Effect Levels (DNEL/DMEL)

hexamethylene diisocyanate, oligomers

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	1	mg/m ³

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	0,5	mg/m ³

Hexamethylene-di-isocyanate

Type of value	Derived No Effect Level (DNEL)	
Reference group	Workers (professional)	
Duration of exposure	Short-term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	0,07	mg/m ³

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	0,035	mg/m ³

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

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Reference group	Workers (professional)	
Duration of exposure	Long-term	
Route of exposure	inhalative	
Mode of action	Local effects	
Concentration	0,035	mg/m ³

Predicted No Effect Concentration (PNEC)

hexamethylene diisocyanate, oligomers

Type of value	PNEC	
Type	Saltwater	
Concentration	0,127	mg/l
Type of value	PNEC	
Type	marine water	
Concentration	0,0127	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	266700	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	26670	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	53182	mg/kg
Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	38,28	mg/l

Hexamethylene-di-isocyanate

Type of value	PNEC	
Type	Freshwater	
Concentration	> 0,0774	mg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	> 0,00774	mg/l
Type of value	PNEC	
Type	Fresh water sediment	
Concentration	> 0,01334	mg/kg
Type of value	PNEC	
Type	saltwater sediment	
Concentration	> 0,001334	mg/l
Type of value	PNEC	
Type	Soil	
Concentration	> 0,0026	mg/kg

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Type of value	PNEC	
Type	Sewage treatment plant (STP)	
Concentration	8,42	mg/l

8.2. Exposure controls

Exposure controls

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

Respiratory protection

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

Hand protection

Protective gloves complying with EN 374.

Glove material

Multilayer gloves made from

Appropriate Material Fluorinated rubber / butyl-rubber

Material thickness \geq 0,7 mm

Breakthrough time \geq 30 min

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

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

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

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

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

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

Eye protection

Wear eye glasses with side protection according to EN 166.

Body protection

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

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	characteristic
Odour threshold	
Remarks	not determined
Melting point	
Remarks	not determined
Freezing point	



Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Remarks not determined

Initial boiling point and boiling range

Remarks not determined

Flash point

Value 25 °C

Evaporation rate

Remarks not determined

Flammability (solid, gas)

not determined

Upper/lower flammability or explosive limits

Remarks not determined

Vapour pressure

Remarks not determined

Vapour density

Remarks not determined

Density

Value appr. 1,047 kg/l
Temperature 20 °C

Solubility in water

Remarks not determined

Solubility(ies)

Remarks not determined

Partition coefficient: n-octanol/water

Remarks not determined

Ignition temperature

Remarks not determined

Decomposition temperature

Remarks not determined

Viscosity

Remarks not determined

Efflux time

Value 20 to 48 s
Temperature 20 °C
Method DIN EN ISO 2431 - 3 mm

Explosive properties

evaluation not determined

Oxidising properties

Remarks not determined

9.2. Other information

Non-volatile content

Value 60 %
Method calculated value

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Other information

This information is not available.

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

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

To avoid thermal decomposition, do not overheat.

10.4. Conditions to avoid

Isolate from sources of heat, sparks and open flame.

10.5. Incompatible materials

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Uncontrolled exothermic reactions occur with amines and alcohols. The product reacts slowly with water resulting in evolution of carbon dioxide. Gaseous decomposition products cause pressure to build up in tightly sealed vessels. Precautions should be taken to minimise exposure to atmospheric humidity or water: CO₂ will be formed which in closed containers can result in pressurisation.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide, nitrous oxides (NO_x), dense black smoke, hydrocyanic acid,
Stable under recommended storage and handling conditions (see section 7).

11. Toxicological information**11.1. Information on toxicological effects****Acute oral toxicity**

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

Acute oral toxicity (Components)**Hexamethylene-di-isocyanate**

Species	rat		
LD50		746	mg/kg
Method	OECD 401		

Acute dermal toxicity

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

Acute inhalational toxicity

ATE		3,3373	mg/l
Administration/Form	Dust/Mist		
Method	calculated value (Regulation (EC) No. 1272/2008)		
Remarks	The classification criteria are met.		

Acute inhalative toxicity (Components)**hexamethylene diisocyanate, oligomers**

ATE		1,5	mg/l
-----	--	-----	------

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Duration of exposure 4 h
Administration/Form Dust/Mist

Skin corrosion/irritation

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

Skin corrosion/irritation (Components)**Hexamethylene-di-isocyanate**

Species rabbit
evaluation Severe skin irritation

Serious eye damage/irritation

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

Serious eye damage/irritation (Components)**Hexamethylene-di-isocyanate**

Species rabbit
evaluation Severe eye irritation

Sensitization

evaluation May cause sensitization by skin contact.
Method Calculation method (Regulation (EC) No. 1272/2008)
Remarks The classification criteria are met.

Sensitization (Components)**hexamethylene diisocyanate, oligomers**

evaluation May cause sensitization by skin contact.

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)**Single exposure**

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

Repeated exposure

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

Specific Target Organ Toxicity (STOT) (Components)**hexamethylene diisocyanate, oligomers****Specific target organ toxicity - repeated exposure**

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

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

Hexamethylene-di-isocyanate

Specific target organ toxicity - single exposure

evaluation May cause respiratory irritation.
Organs: Respiratory tract

Aspiration hazard

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

Other information

No toxicological data are available.

12. Ecological information

12.1. Toxicity

General information

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

Daphnia toxicity (Components)

hexamethylene diisocyanate, oligomers

Species	Daphnia magna (Water flea)			
EC50	10	to	100	mg/l
Duration of exposure	48	h		

12.2. Persistence and degradability

General information

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

Biodegradability (Components)

hexamethylene diisocyanate, oligomers

evaluation Not readily biodegradable.

12.3. Bioaccumulative potential

General information

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

Partition coefficient: n-octanol/water

Remarks not determined

12.4. Mobility in soil

General information

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

Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

General information

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

12.6. Other adverse effects

General information

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

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

General information / ecology

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

13. Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

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

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

modified product

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

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

14. Transport information




Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	D/E		
14.1. UN number	1263	1263	1263
14.2. UN proper shipping name	PAINT	PAINT	PAINT
14.3. Transport hazard class(es)	3	3	3
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 l		
Transport category	3		
14.5. Environmental hazards		no	

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

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

VOC

VOC (EU) 40 % 419 g/l

Other information

All components are contained in the TSCA inventory or exempted.

15.2. Chemical safety assessment

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

16. Other information

Hazard statements listed in Chapter 3

H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H330 Fatal if inhaled.

Trade name: glimtrex SIGNUM 2-Pack Lacquer Hardener mat and satin 103002-10

Version: 23 / DE

Revision: 07.07.2021

Replaces Version: 22 / DE

Print date: 20.10.21

H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Acute Tox. 1	Acute toxicity, Category 1
Acute Tox. 4	Acute toxicity, Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, Category 3
Eye Irrit. 2	Eye irritation, Category 2
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Irrit. 2	Skin irritation, Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3	Specific target organ toxicity - single exposure, Category 3

Abbreviations

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 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.