

Trade name : Revision date : Print date : CreaGlas 2K-PU-Finish 3471 10.05.2023 10.05.2023

Version (Revision) :

19.0.0 (18.0.0)

# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

# **1.1 Product identifier**

CreaGlas 2K-PU-Finish 3471

# 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses

Products Category [PC]

PC 9 - Coatings and paints, fillers, putties, thinners.

#### Uses advised against

There are no information about relevant identified uses of the product according to the Regulation (EC) No. 1907/2006 (REACH-Regulation), which are advised against. For using the product observe the information in the Technical data sheet of the product.

# 1.3 Details of the supplier of the safety data sheet

### Supplier

Brillux GmbH & Co KG www.brillux.de

**Street :** Weseler Straße 401

Postal code/City: D - 48163 Münster

**Telephone :** +49 (0)251-7188-0

**Telefax :** +49 (0)251-7188-280

### Information contact :

Electronic mail address of the well-informed person for safety data sheets:sdb@brillux.de

### **1.4 Emergency telephone number**

Outside the business hours (9 a.m. to 5 p.m.): (Giftinformationszentrum-Nord, Göttingen, consultation in german or english language) Telephone: +49 (0)551-19240.

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

### Classification according to Regulation (EC) No 1272/2008 [CLP] None

**Additional information** 

This product is not dangerous according to the regulation (EC) No. 1272/2008 (CLP).

### 2.2 Label elements

# Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Special rules for supplemental label elements for certain mixtures

EUH208Contains 1,2-BENZISOTHIAZOL-3(2H)-ONE.May produce an allergic reaction.EUH210Safety data sheet available on request.

### 2.3 Other hazards

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605. The product does not contain any substances, which fulfil the criteria for PBT or vPvB in accordance with the Annex XIII of the Regulation (EC) No 1907/2006 (REACH-Regulation).

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

3.2 Mixtures

Description



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Coating based on acrylic resins;

Composition:

Polyacrylate resins, titanium dioxide, inorganic/organic pigments (depending on the shade), silicates, water, glycol ether, additives and preservatives (benzisothiazolinone and sodium pyrithione).

Hazardous ingredients

1,2-BENZISOTHIAZOL-3(2H)-ONE ; REACH No. : 01-2120761540-60 ; EC No. : 220-120-9; CAS No. : 2634-33-5

Weight fraction : Classification 1272/2008 [CLP] : ≥ 0,005 - < 0,05 % Acute Tox. 2 ; H330 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Acute 1 ; H400 Aquatic Chronic 2 ; H411 Skin Sens. 1 ; H317: C ≥ 0,05 % • (M Acute=1)

Specific Conc. Limits : Additional information

For full text of Hazard- and EU Hazard-statements: 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. Immediately remove all contaminated clothing. If unconscious no administration by mouth, storage in recovery position and seek medical advice. If medical advice is needed, have product container or label at hand.

# **Following inhalation**

When symptoms persists, take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration.

# In case of skin contact

Take off immediately all contaminated clothes. Wash away with soap and water and rinse. Do NOT use solvents or thinners. If skin irritation continues, consult a doctor.

### After eye contact

Remove contact lenses, keep eyelids open. Rinse open eye immediately with plenty of running water. Seek medical adivce if complaint continues.

# **Following ingestion**

Drink water in small draught. Keep at rest. Do not induce vomiting. When swallowed immediately consult and show packing or label to physician.

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

**4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

# **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media

# Suitable extinguishing media

This product is not flammable. In case of a fire extingnish surroundings as indicated.

# Unsuitable extinguishing media

None known.

# 5.2 Special hazards arising from the substance or mixture

# Hazardous combustion products

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

# 5.3 Advice for firefighters

# Special protective equipment for firefighters

When extinguishing fires, use breathing apparatus with an independent source of air.

# 5.4 Additional information

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Cool endangered containers with water in case of fire. Do not allow run-off from fire-fighting to enter drains or water courses.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. The product produced in combination with water slippery surfaces.

# 6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Holding polluted washing water back and disposing of duly.

# 6.3 Methods and material for containment and cleaning up

# For 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). Remove residue by rinsing thoroughly with water. Thoroughly clean contaminated objects and floors and observe environmental regulations.

### 6.4 Reference to other sections

See Section 7 for information on safe handling. You find information about the safety equipment of persons in the section 8, information about the refuse disposal in section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

### Protective measures

No special measures necessary in the case of regulation storage and handling. Ensure a good ventilation in room and working area. Avoid contact with skin and eyes For personal protection see Section 8. Keep out of reach of children. Read label before use.

#### Measures to prevent fire

This product is not flammable. Cool endangered containers with water.

### Advices on general occupational hygiene

While working do not eat , drink or smoke. Wash hands and face before breaks and after work and take a shower if necessary. Immediately remove all contaminated clothing.

# 7.2 Conditions for safe storage, including any incompatibilities

# **Requirements for storage rooms and vessels**

Keep container tightly in a dry, cool and good ventilated place. Do not store the product in lounge room. Keep only in the original container. Protect against frost. Keep out of the reach of children.

#### Hints on joint storage

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Store away from foodstuffs. **Storage class (TRGS 510) :** 12

### Further information on storage conditions

Keep container tightly sealed. Store at 5°-35°C. Containers should be kept dry and sealed.

### 7.3 Specific end use(s)

For using the product observe the information in the Technical data sheet of the product.

# Industrial sector specific solutions

**GISCODE :** Product code in accordance to GISBAU (hazardous materials information system of the German professional associations of the building and construction industry): PU10.

# SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**Occupational exposure limit values** 



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Occupational exposure lim	
SODIUM PYRITHIONE ; CAS No. : 381	
Limit value type (country of origin) :	
Limit value :	1 mg/m <sup>3</sup>
Peak limitation :	4
Remark :	H,Y
Version :	01.03.2002
DNEL-/PNEC-values	
DNEL/DMEL	
1,2-BENZISOTHIAZOL-3(2H)-ONE ; C	AS No. : 2634-33-5
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	1,2 mg/m <sup>3</sup>
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	345 µg/kg bw/day
Limit value type :	DMEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	6,81 mg/m <sup>3</sup>
Limit value type :	DMEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	966 µg/kg bw/day
PNEC	
1,2-BENZISOTHIAZOL-3(2H)-ONE ; C	AS No. : 2634-33-5
Limit value type :	PNEC (Aquatic, freshwater)
Exposure route :	Water (Including sewage plant)
Exposure time :	Short-term
Limit value :	4,03 μg/l
Limit value type :	PNEC (Aquatic, intermittent release)
Exposure route :	Water (Including sewage plant)
Exposure time :	Short-term
Limit value :	1,1 μg/l
Limit value type :	PNEC (Aquatic, marine water)
Exposure route :	Water (Including sewage plant)
Exposure time :	Short-term
Limit value :	403 ng/L
Limit value type :	PNEC (Aquatic, marine water)
Exposure route :	Water (Including sewage plant)
Exposure time :	Long-term
Limit value :	110 ng/L
Limit value type :	PNEC Soil, Freshwater
Exposure route :	Soil
Exposure time : Limit value :	Short-term
	49,9 μg/kg dry weight
Limit value type : Exposure route :	PNEC (Soil) Soil
•	Short-term
Exposure time : Limit value :	
	3 mg/kg dry weight PNEC Soil, Marine water
Limit value type : Exposure route :	Soil
Exposure time :	Soli Short-term
Exposure time.	
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Limit value : Limit value type : Exposure route : Exposure time : Limit value : 4,99 μg/kg dry weight PNEC (Sewage treatment plant) Water (Including sewage plant) Short-term 1,03 mg/l

# 8.2 Exposure controls

### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this shoud be achieved by the use of local exhaust ventilation and good general extraction. Observe data available of section 7.

# **Personal protection equipment**

### Eye/face protection

Use protection glasses in case of spattering.

### Skin protection

#### Hand protection

At use as agreed a protective gloves from nitrile rubber, tested according to EN 374, with a material thickness 0,38 mm has to be used. Notes of the manufacturer have to be taken into account. Penetration time of the glove material: > = 8 h.

By longer or repeated contact the penetration times can be considerably shorter. The protective gloves should replaced after the first wear out or a damage of the gloves. Gloves of cotton should be used under the gloves of polychloropren or nitrile rubber. After washing hands replace lost skin fat by fat containing skin creams.

# Body protection

Using protective clothing.

# **Respiratory protection**

Breathing protection equipment is not required in good ventilated places. Do not inhale the vapour.

#### **General information**

Avoid contact with eyes and skin. Immediately remove all contaminated clothing. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Ensure a good ventilation in room and working area. Do not breathe vapour.

#### **Environmental exposure controls**

The product should not reach waters and the ground. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

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

# 9.1 Information on basic physical and chemical properties

### Appearance

Physical state : Liquid.

Colour : conformable to product designation.

### Odour

Poor, characteristic.

### Safety characteristics

Melting point/freezing point :	(1013 hPa)		No data available	
Initial boiling point and boiling range :	(1013 hPa)	>	100	°C
Decomposition temperature :	(1013 hPa)		No data available	
Flash point :			not applicable	
Auto-ignition temperature :			not applicable	
Lower explosion limit :			not applicable	
Upper explosion limit :			not applicable	
Vapour pressure :	( 50 °C )		No data available	
Density :	( 20 °C )	approx.	1,3 - 1,4	g/cm <sup>3</sup>

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Solvent separa Water solubilit pH : log P O/W : Flow time : Viscosity : Kinematic visco	<b>y</b> :	( 20 ℃ ) ( 20 ℃ ) ( 20 ℃ ) ( 20 ℃ ) ( 40 ℃ )		not applicable mixable 8 - 9 No data available No data available No data available No data available		DIN-cup 4 mm
Relative vapou VOC-value :	•	(20 °C)	max.	No data available 5	g/l	
Flammable liqu Particle Charac		The product is not not applicable	t ignitable.			

### 9.2 Other information

The mentioned VOC value refers to the mixture of the product, incl. harder, ready for use. Other physical and chemical data have not been determined.

### **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No dangers connected by a possible reactivity of the product are known to proper handling and storage.

# **10.2 Chemical stability**

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

### **10.3 Possibility of hazardous reactions**

No dangerous reactions are known if stored and handled the product correctly.

# **10.4 Conditions to avoid**

Keep away from frost, heat and direct sunlight.

### **10.5 Incompatible materials**

No dangerous reaction known. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.6 Hazardous decomposition products

No dangerous decomposition product are known if stored and handled correctly. When exposed to high temperatures or in case of fire hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen, may produced.

# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

### Acute toxicity

- Acute toxicity:
- Acute oral toxicity: No data available;
- Acute dermal toxicity: No data available;
- Acute inhalation toxicity: No data available.

### Acute oral toxicity

neare of all contently	
Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )
Exposure route :	Oral
Species :	Rat
Effective dose :	597 mg/kg
Acute dermal toxicity	
Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	not relevant



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Parameter :	LD50 ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg
Acute inhalation toxicity	
Parameter :	ATEmix calculated
Exposure route :	Inhalation (vapour)
Effective dose :	not relevant
Corrosion	

# С

- To the skin: Not expecting any damage or irritancy.

- At the eye: Not expecting any damage or irritancy.

### **Respiratory or skin sensitisation**

The product contains sensitizing substances, which may produce an allergic reaction (see section 2 and 3).

### Skin sensitisation

Parameter : Species :

> Result : Method :

Skin sensitisation (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5) Mouse Sensitising. **OECD 429** 

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The product is not classified as human germ cell mutagenic, carcinogenic or human reproductive toxic (CMR effects).

#### STOT-single exposure

No risk expected.

# STOT-repeated exposure

No risk expected.

# **Aspiration hazard**

No risk expected.

# 11.2 Information on other hazards

# **Endocrine disrupting properties**

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

### Other adverse effects

This product is unlikely to harm health, given normal and proper handling and hygenic precautions.

### **Additional information**

The product is classified in toxicological terms on the basis of the results of the calculation procedure outlined within the Regulation (EC) No 1272/2008 (CLP-Regualtion), listed in sections 2 and 3. At proper dealing and use as agreed the product does not cause any effects bad for health after our experiences and

the information submitted to us.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

### Aquatic toxicity

### Chronic (long-term) fish toxicity

NOEC ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 ) Parameter : Oncorhynchus mykiss (Rainbow trout) Species : Chronic (long-term) fish toxicity Evaluation parameter : Effective dose : 0,21 mg/l Exposure time : 28 D Method : **OECD 215** Chronic (long-term) toxicity to aquatic invertebrate NOEC ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )

Parameter :

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Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	1,2 mg/l
Exposure time :	21 D
Method :	OECD 211
Toxicity to other aquatic plants	s/organisms
Parameter :	NOEC ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )
Species :	Selenastrum capricornutum
Evaluation parameter :	Acute (short-term) algae toxicity
Effective dose :	0,04 mg/l
Exposure time :	72 h
Sewage treatment plant	
Parameter :	EC20 ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )
Inoculum :	Activated sludge
Evaluation parameter :	Effects in sewage plants
Effective dose :	3,3 mg/l
Exposure time :	3 h
Parameter :	EC50 ( 1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5 )
Inoculum :	Activated sludge
Evaluation parameter :	Effects in sewage plants
Effective dose :	13 mg/l
Exposure time :	3 h
Persistence and degradabi	lity
These are not data avaible about the	e potential of the product concerning his persistency and degradability.
Biodegradation	
Parameter :	Biodegradation (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5)
Inoculum :	Degree of elimination
Degradation rate :	approx. 90 %

Inoculum :	Degree of elimination
Degradation rate :	approx. 90 %
Evaluation :	Biodegradable.
Method :	OECD 302B
Parameter :	Biodegradation (1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5)
Inoculum :	Degree of elimination
Degradation rate :	> 70 %
Evaluation :	Biodegradable.
Method :	OECD 303A

### 12.3 Bioaccumulative potential

Bioconcentration factor (BCF) (1,2-BENZISOTHIAZOL-3(2H)-ONE ; CAS No. : 2634-33-5) 6,95

Value : 6,95 Method : 0ECD 305

These are not data available about the bio accumulation potential of the product.

# 12.4 Mobility in soil

Parameter :

12.2

These are not datas available about the potential of the product concerning his mobility in the ground. A penetrating into soil, waters and sewage system should be prevented.

### Adsorption

Parameter :	Log KOW (1,2-BENZISOTHIAZOL-3(2H)-ONE; CAS No.: 2634-33-5)
Effective dose :	0,7
Evaluation :	HPLC method
Method :	OECD 117

# 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6 Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.



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# 12.7 Other adverse effects

Acute or chronic damages to water organisms by the product in the aquatic environment are not expecting.

### 12.8 Additional ecotoxicological information

Avoid exposing into ground, waterways and drainage. The classification of the product is based on summation of classified components according to the Regulation (EC) No 1272/2008 (CLP-Regulation). See details in sections 2 and 3.

### **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

# Directive 2008/98/EC (Waste Framework Directive)

#### Before intended use

Dispose of contents/container to approved disposal company or local collection according to the local regulations. Packaging with not dry uped residues have to droped at official collecting sites. Packaging with dry uped residues can be disposed together with household garbage or building site garbage. Do not empty into waters or drains.

# Waste codes/waste designations according to EWC/AVV

For the product:

Disposal-definition No.: 08 01 12 - Paint and varnish waste with the exception of the ones who come under 08 01 11 \*.

# After intended use

Only empty packaging can be transfered to recycling. Uncleaned packaging must be disposed of in the same manner as the medium.

### **SECTION 14: Transport information**

### 14.1 UN number

No dangerous good in sense of these transport regulations.

#### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

# 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

# 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

# 14.6 Special precautions for user

None

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant because the product in type of delivery does not transport in bulks according to the Internationa Maritime Organization (IMO) instruments.

# **SECTION 15: Regulatory information**

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

EU legislation Authorisations and/or restrictions on use Restrictions on use Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions): Use restriction according to REACH annex XVII, no. : 75 Other regulations (EU)



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Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

Product sub-category and VOC limiting values in accordance with appendix II, letter A of the guideline:

Category j, type WB;

VOC limiting value of the category for 2010: 140 g/l.

This product contains max. 5 g/l VOC.

The mentioned VOC value refers to the mixture of the product ready for use of tribe varnish and harder.

# National regulations

### Water hazard class

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

### Additional information

The product is not classified as a solid substance according to the criteria of the Penetrometer test (ADR, part 2, section 2.3.4) and also fulfils not the criteria for solid substances according to the TRwS 779 number 2.1.1. Maternity regulations and Young Persons Employment Act are to take into account.

### **15.2 Chemical Safety Assessment**

A chemical safety assessments was not carried out.

# **SECTION 16: Other information**

### 16.1 Indication of changes

02. Special rules for supplemental label elements for certain mixtures · 15. Water hazard class

### 16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des merchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany) AOX: Adsorbable Organic halogen compounds

ATEmix: Calculated acute toxicity estimate of mixture

BCF: Bio-Concentration Factor

CAS: Chemical Abstract Service

CLP: Classification, Labelling and Packaging

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction

CSR: Chemical Safety Report

DNEL: Derived No Effect Level

EC: European Commission

EC50: Effective Concentration 50%

ECHA: European Chemical Agency

EEC: European Economic Community

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EWC: European Waste Catalogue

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IC50: Inhibition Concentration 50%

IMDG Code: International Maritime Dangerous Goods Code

IMO: International Maritime Organization

LC50: Lethal concentration 50%

LD50: Lethal Dose 50%

LOAEL: Lowest Observed Adverse Effect Level

LOEL: Lowest observable effect level

MAK: Treshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG)

MARPOL: Convention for the Preventation of Marine Pollution from Ships

MVZ: molar ratio

n.a.: Not applicable

n.d.: Not determined

n.r.: Not relevant



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NLP: No Longer Polymers NOAEC: No Observed Adverse Effect Concentration NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration NOEL: No Observed Effect Level **OEL:** Occupational Exposure Limit PBT: Persistent, bioaccumulative, toxic PNEC: Predicted No Effect Concentration RCP: Reciprocal calculation procedure REACH: Registration, Evaluation and Authorization of Chemical) RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer) STEL: Short-term Exposure Limit SVHC: Substance of Very High Concern TLV - TWA: Threshold Limit Value - Time Weighed Average VOC: Volatile Organic Compounds vPvB: Very persistent, very bioaccumulative.

# 16.3 Key literature references and sources for data

# <sup>16.4</sup> Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The evaluation of hazard information of the product was carried out in accordance to Annex I of the REGULATION (EC) No 1272/2008 (CLP Regulation).

# 16.5 Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

### 16.6 Training advice

None

# 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



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# SECTION 1: Identification of the substance/mixture and of the company/ undertaking

### 1.1 Product identifier

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- **1.2** Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses
  - Products Category [PC]

PC 9 - Coatings and paints, fillers, putties, thinners.

### Uses advised against

The product may be used only in professional or industriell applications.

# 1.3 Details of the supplier of the safety data sheet

#### Supplier

Brillux GmbH & Co KG www.brillux.de

Street : Weseler Straße 401

Postal code/City: D - 48163 Münster

Telephone : +49 (0)251-7188-0

**Telefax :** +49 (0)251-7188-280

### Information contact :

Electronic mail address of the well-informed person for safety data sheets:sdb@brillux.de

# 1.4 Emergency telephone number

Outside the business hours (9 a.m. to 5 p.m.): (Giftinformationszentrum-Nord, Göttingen, consultation in german or english language) Telephone: +49 (0)551-19240.

### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 ; H332 - Acute toxicity (inhalative) : Category 4 ; Harmful if inhaled.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction. STOT SE 3 ; H335 - STOT-single exposure : Category 3 ; May cause respiratory irritation.

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

# 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms



Signal word Warning Hazard components for labelling ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2

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HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 Hazard statements H332 Harmful if inhaled. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects. **Precautionary statements** P102 Keep out of reach of children. P261 Avoid breathing vapours. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P312 Call a POISON CENTER or a doctor if you feel unwell. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water P303+P361+P353 [or shower]. P501 Dispose of contents/container to approved disposal company or local collection. Special rules for supplemental label elements for certain mixtures EUH204 Contains isocyanates. May produce an allergic reaction.

# 2.3 Other hazards

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605. The product does not contain any substances, which fulfil the criteria for PBT or vPvB in accordance with the Annex XIII of the Regulation (EC) No 1907/2006 (REACH-Regulation).

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

### 3.2 Mixtures

Description	
Aliphatic polyisocyanates.	
Hazardous ingredients	
ALIPHATIC POLYISOCYANATE ; CAS N	No. : 160994-68-3
Weight fraction :	≥ 75 - < 80 %
Classification 1272/2008 [CLP] :	Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 STOT SE 3 ; H335 Aquatic Chronic 3 ; H412
HEXAMETHYLENE DIISOCYANATE, OL EC No. : 500-060-2; CAS No. : 28182-	LIGOMERISATION PRODUCT (URETHDIONE TYPE) ; REACH No. : 01-2119488177-26 ; -81-2
Weight fraction :	≥ 15 - < 20 %
Classification 1272/2008 [CLP] :	Acute Tox. 3 ; H331 Skin Sens. 1 ; H317 STOT SE 3 ; H335 EUH204
HEXAMETHYLENE-DI-ISOCYANATE ; F	REACH No. : 01-2119457571-37 ; EC No. : 212-485-8; CAS No. : 822-06-0
Weight fraction :	< 0,1 %
Classification 1272/2008 [CLP] :	Acute Tox. 2 ; H330 Resp. Sens. 1 ; H334 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 STOT SE 3 ; H335
Specific Conc. Limits :	Resp. Sens. 1 ; H334: C $\geq$ 0,5 % • Skin Sens. 1 ; H317: C $\geq$ 0,5 %
Additional information	
For full text of Hazard- and EU Hazard	l-statements: see SECTION 16.

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

4.1 Description of first aid measures General information



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In all cases of doubt, or when symptoms persist, seek medical attention. Immediately remove all contaminated clothing. If unconscious no administration by mouth, storage in recovery position and seek medical advice. If medical advice is needed, have product container or label at hand.

# **Following inhalation**

When symptoms persists, take the casualty into the fresh air and keep warm. Irregular breathing/no breathing: artificial respiration. In case of unconsciousness place patient stably in side position for transportation. Irregular breathing/no breathing: artificial respiration.

### In case of skin contact

Take off immediately all contaminated clothes. Wash away with soap and water and rinse. Do NOT use solvents or thinners. If skin irritation continues, consult a doctor.

### After eye contact

Remove contact lenses, keep eyelids open. Rinse open eye immediately with plenty of running water. Seek medical adivce if complaint continues.

### Following ingestion

Drink water in small draught. Keep at rest. Do not induce vomiting. When swallowed immediately consult and show packing or label to physician.

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

Potential symptoms: Headache, dizziness, giddiness, skin irritation and eye iriitation are possible. Allergic symptoms.

# **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

# Suitable extinguishing media

In case of fire: Use alcohol resistant foam, CO2, powders or water spray for extinction.

### Unsuitable extinguishing media

In case of fire: Do not use waterjet for extinction.

# 5.2 Special hazards arising from the substance or mixture

### Hazardous combustion products

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. In case of fire carbon monoxide, oxides of nitrogen, isocyanide and hydrogen cyanide may be formed.

# 5.3 Advice for firefighters

### Special protective equipment for firefighters

At a fire caused by the product a breathing apparatus with an independent source of air is to have ready and to use if necessary for the firefighting.

### 5.4 Additional information

Cool endangered containers with water in case of fire. Do not allow run-off from fire-fighting to enter drains or water courses.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8. Do not inhale the vapour. Ensure a good ventilation in room and working area. Avoid contact with eyes and skin. Keep no protective persons away, personal should wear protective clothings.

### 6.2 Environmental precautions

Do not empty into drains. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations. Holding polluted washing water back and disposing of duly.

# 6.3 Methods and material for containment and cleaning up

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### For 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). Subsequently put in the waste container. Do not seal (CO2 may be given off). The areas concerned cleaning with a customary water based cleaning agent, not using organic solvents if possible.

Ensure adequate ventilation.

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

You find information about the safety equipment of persons in the section 8, information about the refuse disposal in section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

### **Protective measures**

Ensure a good ventilation in room and working area. Only use the material in places where open light, fire and other flammable sources can be kept away. For personal protection see Section 8. Avoid contact with skin and eyes. Read label before use. Use only outdoors or in a well-ventilated area.

### Measures to prevent fire

Keep away from ignition sources - No smoking.

### Measures to prevent aerosol and dust generation

Avoid breathing vapours.

### Advices on general occupational hygiene

While working do not eat , drink or smoke. Wash hands and face before breaks and after work and take a shower if necessary. Immediately remove all contaminated clothing.

### 7.2 Conditions for safe storage, including any incompatibilities

# Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Never use pressure to empty: container is not a pressure vessel. No smoking. Prevent unauthorized access. Do not store the product in lounge room. Keep only in the original container. Keep out of the reach of children. Store in a well-ventilated place. Keep cool. Offering protection against wetness and humidity. Protect against frost.

### Hints on joint storage

Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Store away from foodstuffs. Avoid moisture.

# Storage class (TRGS 510): 6.1C

### Further information on storage conditions

Keep container tightly sealed. Store at 5°-35°C. Containers should be kept dry and sealed.

# 7.3 Specific end use(s)

For using the product observe the information in the Technical data sheet of the product.

### Industrial sector specific solutions

**GISCODE :** Product code in accordance to GISBAU (hazardous materials information system of the German professional associations of the building and construction industry): PU10.

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

### Occupational exposure limit values

HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 Limit value type (country of origin) : TRGS 900 ( D ) Limit value : 0,005 ppm / 0,035 mg/m<sup>3</sup> Peak limitation : 1/=2=(I)



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Remark :		Sa			
Version :		02.07.2021			
Remark					
Taking into acco	ount the details me	ntioned in the TRGS 900	for the supervision of AGW.		
Biological lin	nit values				
-	-DI-ISOCYANATE ; C	AS No · 822-06-0			
	(country of origin) :				
Parameter :	(country of origin) i		after hydrolysis) / Urine (U) / End of expo	osure or end of shi	
Limit value :		0,15 mg/g Creatinine			
Version :		04.05.2021			
DNEL-/PNEC	-values				
DNEL/DMEL	values				
•			JCT (URETHDIONE TYPE) ; CAS No. : 28	0107 01 7	
		DNEL/DMEL (Worker)	CT (URETHDIONE TIPE), CAS NO 20	5162-61-2	
Limit value type Exposure rout		Inhalation			
Exposure freq		Short-term			
Limit value :		$0,7 \text{ mg/m}^3$			
Limit value type	2:	DNEL/DMEL (Worker)			
Exposure rout		Inhalation			
Exposure freq		Long-term			
Limit value :	,	0,35 mg/m <sup>3</sup>			
HEXAMETHYLEN	E-DI-ISOCYANATE ;	CAS No. : 822-06-0			
Limit value type	e:	DNEL/DMEL (Industrial)			
Exposure rout	e :	Dermal			
Exposure freq	uency :	Short-term			
Limit value type	2:	DNEL/DMEL (Industrial)			
Exposure rout	e :	Inhalation			
Exposure freq	uency :	Short-term			
Limit value :		0,07 mg/m <sup>3</sup>			
Limit value type		DNEL/DMEL (Industrial)			
Exposure rout		Inhalation			
Exposure freq	uency :	Long-term			
Limit value :		0,035 mg/m <sup>3</sup>			
PNEC					
			JCT (URETHDIONE TYPE) ; CAS No. : 28	3182-81-2	
Limit value type		PNEC (Aquatic, freshwat			
Exposure rout Limit value :	ς.	Water (Including sewage > 0,05 mg/l	ε ριατιζ		
Limit value type	2 ·	PNEC (Aquatic, marine v	vater)		
Exposure rout		Water (Including sewage			
Limit value :	с.	> 0,005 mg/l			
Limit value type	• ·	PNEC (Sediment, freshw	ater)		
Exposure rout		Soil			
Limit value :		> 1,33 mg/kg			
Limit value type	e:	PNEC (Sediment, marine	e water)		
Exposure rout		Soil			
Limit value :		> 0,133 mg/kg			
Limit value type	e :	PNEC soil			
Exposure rout	e :	Soil			
Limit value :		> 0,066 mg/kg			
Limit value type		PNEC (Sewage treatmen			
Exposure rout	e :	Water (Including sewage	e plant)		
Limit value :		55,6 mg/l			

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### 8.2 Exposure controls

### Appropriate engineering controls

Provide adequate ventilation. 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 (=Occupational Exposure Limit), suitable respiratory protection must be worn. Observe data available of section 7.

# Personal protection equipment

### Eye/face protection

Use protection glasses in case of spattering.

# Skin protection

# Hand protection

For a short-term contact protective gloves made of nitrile rubber are suitable with a material thickness of 0.38 mm. For longer or repeated contact protective gloves made of butyl rubber are used with a material thickness of >= 0,7 mm. Penetration time >= 480 min. By longer or repeated contact the penetration times can be considerably shorter. The protective gloves should replaced after the first wear out or a damage of the gloves. Gloves of cotton should be used under the gloves of polychloropren or nitrile rubber. After washing hands replace lost skin fat by fat containing skin creams.

#### **Body protection**

Using protective clothing.

### **Respiratory protection**

Breathing protection equipment is not required in good ventilated places. A respiratory protection (combination filter A2-P2) is required by inadequate ventilation and by spray application of the 2K-Product.

### **General information**

Avoid contact with eyes and skin. Immediately remove all contaminated clothing. Do not eat or drink during work - no smoking. Wash hands before breaks and after work. Ensure a good ventilation in room and working area. Do not breathe vapour. Dealing with the product is warned against at oversensitivity of the respiratory tract and the skin (asthma, chronic bronchitis or skin suffering).

#### Environmental exposure controls

The product should not reach waters and the ground. If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

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

# 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state : Liquid.

Colour : conformable to product designation.

#### Odour

Poor, characteristic.

### Safety characteristics

Melting point/freezing point :	(1013 hPa)		No data available	
Initial boiling point and boiling range :	(1013 hPa)		No data available	
Decomposition temperature :	(1013 hPa)		No data available	
Flash point :		>	180	°C
Auto-ignition temperature :			465	°C
Lower explosion limit :			No data available	
Upper explosion limit :			No data available	
Vapour pressure :	( 50 °C )		No data available	
Density :	( 20 °C )	approx.	1,12 - 1,17	g/cm <sup>3</sup>
Solvent separation test :	( 20 °C )		not applicable	
Water solubility :	(20 °C)		practically insoluble	

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рН :			not applicable		
log P O/W :			No data available		
Flow time :	( 20 °C )		No data available		DIN-cup 4 mm
Viscosity :	( 20 °C )		No data available		
Kinematic viscosity :	(40 °C)		No data available		
Relative vapour density :	( 20 °C )		No data available		
VOC-value :		max.	10	g/l	
Flammable liquids :	The product is	ignitable.			
Particle Characterics :	not applicable				

### 9.2 **Other information**

The mentioned VOC value refers to the mixture of the product ready for use of tribe varnish and harder.

# **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

No dangers connected by a possible reactivity of the product are known to proper handling and storage.

# **10.2 Chemical stability**

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

## **10.3 Possibility of hazardous reactions**

# No information available.

# **10.4 Conditions to avoid**

Decomposition starts at 200-250 C° Keep away from frost, heat and direct sunlight. When moisture ingress of water in container forms carbon dioxide gas . This pressure build-up in closed containers possible ( risk of bursting) .

#### **10.5 Incompatible materials**

No dangerous reaction known. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Exothermic reaction with amines and alcohols. Reaction with water seperate CO2. Buildup of pressure in closed containers. Danger that they might burst.

### 10.6 Hazardous decomposition products

No dangerous decomposition product are known if stored and handled correctly. Formation of toxic gases is possible during heating or in case of fire: Carbon monoxide (CO.), nitrogen oxide (NOx), vapour of isocyanate and traces of hydrogen cyanide (HCN).

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

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 Acute toxicity

Acute toxicity:

- Acute oral toxicity: No data available;
- Acute dermal toxicity: No data available;
- Acute inhalation toxicity: No data available.

# Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 ( ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Parameter :	LD50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Exposure route :	Oral



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Charles :	Dat
Species :	Rat
Effective dose :	> 5665 mg/kg
Parameter :	LD50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Exposure route :	Oral
Species :	Rat
Effective dose :	710 mg/kg
Acute dermal toxicity	
Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	not relevant
Parameter :	LD50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	570 mg/kg
Acute inhalation toxicity	
Parameter :	ATEmix calculated
Exposure route :	Inhalation (dust/mist)
Effective dose :	1,07 mg/l
Parameter :	ATEmix calculated (ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3)
Exposure route :	Inhalation (dust/mist)
Effective dose :	0,5 mg/l
Parameter :	ATEmix calculated ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Exposure route :	Inhalation (dust/mist)
Effective dose :	1,5 mg/l
Parameter :	LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Exposure route :	Inhalation
Species :	Rat
Effective dose :	0,124 mg/l
Exposure time :	4 h
Parameter :	LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Exposure route :	Inhalation
Species :	Mouse
Effective dose :	1,57 mg/l
Corrosion	

Irritation:

- Skin contact: Irritating to skin.

- Eye contact: Causes serious eye damage.

- Respiratory: May cause respiratory irritation.

# **Respiratory or skin sensitisation**

The product is labeled as skin sensitizing.

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

The product is not classified as human germ cell mutagenic, carcinogenic or human reproductive toxic (CMR effects).

# STOT-single exposure

May cause respiratory irritation.

# STOT-repeated exposure

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in nonallergic contact dermatitis and absorption through the skin.



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No risk expected.

# Aspiration hazard

No risk expected.

# **11.2 Information on other hazards**

### **Endocrine disrupting properties**

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

### Other adverse effects

This product is unlikely to harm health, given normal and proper handling and hygenic precautions.

### **Additional information**

The product is classified in toxicological terms on the basis of the results of the calculation procedure outlined within the Regulation (EC) No 1272/2008 (CLP-Regualtion), listed in sections 2 and 3. At proper dealing and use as agreed the product does not cause any effects bad for health after our experiences and

the information submitted to us.

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

#### 12.1 Toxicity

Aquatic toxicity	
Acute (short-term) fish toxicity	
Parameter :	LC50 ( ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 )
Species :	Danio rerio (zebrafish)
Effective dose :	28,3 mg/l
Exposure time :	96 h
Parameter :	LC50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Species :	Danio rerio (zebrafish)
Effective dose :	> 100 mg/l
Exposure time :	96 h
Parameter :	LC50 ( HEXAMETHYLENE-DI-ISOCYANATE ; CAS No. : 822-06-0 )
Species :	Danio rerio (zebrafish)
Effective dose :	22 mg/l
Exposure time :	96 h
Acute (short-term) toxicity to cr	rustacea
Parameter :	EC50 (ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 )
Species :	Daphnia magna (Big water flea)
Effective dose :	> 100 mg/l
Exposure time :	48 h
Parameter :	EC50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Species :	Daphnia magna (Big water flea)
Effective dose :	> 100 mg/l
Exposure time :	48 h
Acute (short-term) toxicity to al	gae and cyanobacteria
Parameter :	ErC50 ( ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 )
Species :	Scenedesmus subspicatus
Effective dose :	> 100 mg/l
Exposure time :	72 h
Parameter :	ErC50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )
Species :	Scenedesmus subspicatus
Effective dose :	50 - 100 mg/l
Exposure time :	72 h

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 Toxicity to microorganisms

 Parameter :
 EC50 ( ALIPHATIC POLYISOCYANATE ; CAS No. : 160994-68-3 )

 Species :
 Mysidopsis bahia

 Effective dose :
 > 10000 mg/l

 Parameter :
 EC50 ( HEXAMETHYLENE DIISOCYANATE, OLIGOMERISATION PRODUCT (URETHDIONE TYPE) ; CAS No. : 28182-81-2 )

 Species :
 Mysidopsis bahia

 Effective dose :
 5560 mg/l

# 12.2 Persistence and degradability

These are not data avaible about the potential of the product concerning his persistency and degradability.

### 12.3 Bioaccumulative potential

These are not data available about the bio accumulation potential of the product.

### 12.4 Mobility in soil

These are not datas available about the potential of the product concerning his mobility in the ground. A penetrating into soil, waters and sewage system should be prevented.

### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

# 12.6 Endocrine disrupting properties

The product does not contain any substances with endocrine-disrupting properties according to Article 59 Paragraph 1 or substances with endocrine-disrupting properties according to Regulations (EU) 2017/2100 or (EU) 2018/605.

### 12.7 Other adverse effects

Harmful to aquatic life, may cause long-term adverse effects in the aquatic environment.

# 12.8 Additional ecotoxicological information

Avoid exposing into ground, waterways and drainage. The classification of the product is based on summation of classified components according to the Regulation (EC) No 1272/2008 (CLP-Regulation). See details in sections 2 and 3.

## **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

### Directive 2008/98/EC (Waste Framework Directive)

### Before intended use

Dispose of contents/container to approved disposal company or local collection according to the local regulations. Packaging with not dry uped residues have to droped at official collecting sites. Packaging with dry uped residues can be disposed together with household garbage or building site garbage. Do not empty into waters or drains.

### Waste codes/waste designations according to EWC/AVV

For the product:

Disposal-definition No.: 08 01 11\* - Paint and varnish waste which contains organic solvents or other dangerous substances.

#### After intended use

Only empty packaging can be transfered to recycling. Uncleaned packaging must be disposed of in the same manner as the medium.

### Waste codes/waste designations according to EWC/AVV

For the uncleaned packaging:

Disposal-definition No.: 15 01 10\* - packaging containing residues of or contaminated by hazardous substances.

# **SECTION 14: Transport information**

### 14.1 UN number

No dangerous good in sense of these transport regulations.

# 14.2 UN proper shipping name



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No dangerous good in sense of these transport regulations.

# 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

# 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

# 14.6 Special precautions for user

None

# 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant because the product in type of delivery does not transport in bulks according to the Internationa Maritime Organization (IMO) instruments.

# **SECTION 15: Regulatory information**

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

### EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions):

Use restriction according to REACH annex XVII, no.: 3, 74, 75

# Other regulations (EU)

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

Product sub-category and VOC limiting values in accordance with appendix II, letter A of the guideline: Category i, type WB:

VOC limiting value of the category for 2010: 140 g/l.

This product contains max. 10 g/l VOC (preparation ready for use).

### National regulations

### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 0,5 %

#### Water hazard class

Classification according to AwSV - Class : 1 (Slightly hazardous to water)

### Additional information

The product is classified as a solid substance according to the criteria of the Penetrometer test (ADR, part 2, section 2.3.4) and also fulfils the criteria for solid substances according to the TRwS 779 number 2.1.1. Maternity regulations and Young Persons Employment Act are to take into account.

# **15.2 Chemical Safety Assessment**

A chemical safety assessments was not carried out.

# **SECTION 16: Other information**

# 16.1 Indication of changes

02. Classification of the substance or mixture · 02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 15. Restrictions on use · 15. Water hazard class

# 16.2 Abbreviations and acronyms

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des merchandises dangereuses par route)

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany) AOX: Adsorbable Organic halogen



#### Trade name :

**Revision date :** Print date :

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compounds ATEmix: Calculated acute toxicity estimate of mixture BCF: Bio-Concentration Factor CAS: Chemical Abstract Service CLP: Classification, Labelling and Packaging CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction CSR: Chemical Safety Report DNEL: Derived No Effect Level EC: European Commission EC50: Effective Concentration 50% ECHA: European Chemical Agency EEC: European Economic Community EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances EWC: European Waste Catalogue GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals IATA: International Air Transport Association ICAO: International Civil Aviation Organization IC50: Inhibition Concentration 50% IMDG Code: International Maritime Dangerous Goods Code IMO: International Maritime Organization LC50: Lethal concentration 50% LD50: Lethal Dose 50% LOAEL: Lowest Observed Adverse Effect Level LOEL: Lowest observable effect level MAK: Treshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG) MARPOL: Convention for the Preventation of Marine Pollution from Ships MVZ: molar ratio n.a.: Not applicable n.d.: Not determined n.r.: Not relevant NLP: No Longer Polymers NOAEC: No Observed Adverse Effect Concentration NOAEL: No Observed Adverse Effect Level NOEC: No Observed Effect Concentration NOEL: No Observed Effect Level **OEL:** Occupational Exposure Limit PBT: Persistent, bioaccumulative, toxic PNEC: Predicted No Effect Concentration RCP: Reciprocal calculation procedure REACH: Registration, Evaluation and Authorization of Chemical) RID: Regulations concerning the international carriage of dangerous goods by rail (Règlement International concernant le transport de marchandises dangereuses par chemin de fer) STEL: Short-term Exposure Limit SVHC: Substance of Very High Concern TLV - TWA: Threshold Limit Value - Time Weighed Average VOC: Volatile Organic Compounds vPvB: Very persistent, very bioaccumulative. 16.3 Key literature references and sources for data None  $_{16.4}$  Classification for mixtures and used evaluation method according to regulation (EC)

# No 1272/2008 [CLP]

The evaluation of hazard information of the product was carried out in accordance to Annex I of the REGULATION (EC) No 1272/2008 (CLP Regulation).

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H302 Harmful if swallowed. F

H315	Causes skin irritation.



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H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
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.
16.6 Training advice	

None

# 16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.