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Replacing version dated / version: 22.02.2019 / 0012
Valid from: 01.11.2021
PDF print date: 01.11.2021
UVT 390 Top-Z 390 ML
Art.: 9041579

Safety data sheet
according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

UVT 390 Top-Z 390 ML
Art.: 9041579

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

Relevant identified uses of the substance or mixture:

Compound mortar

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

BTI Befestigungstechnik GmbH & Co. KG
Salzstr. 51
74653 Ingelfingen
Tel.: +49 7940 141 141
Fax: +49 7940 141 9141
Email: info@bti.de
Homepage: www.bti.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (BRC)
+1 872 5888271 (BRC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
STOT SE	3	H335-May cause respiratory irritation.
Eye Dam.	1	H318-Causes serious eye damage.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Repr.	1B	H360F-May damage fertility.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.
Skin Corr.	1C	H314-Causes severe skin burns and eye damage.



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2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H335-May cause respiratory irritation. H317-May cause an allergic skin reaction. H360F-May damage fertility. H411-Toxic to aquatic life with long lasting effects. H314-Causes severe skin burns and eye damage.

P201-Obtain special instructions before use. P260-Do not breathe dust or mist. P273-Avoid release to the environment. P280-Wear protective gloves / protective clothing / eye protection / face protection.
 P301+P330+P331-IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313-IF exposed or concerned: Get medical advice / attention.

Restricted to professional users.
 Reaction product: bisphenol-A-(epichlorhydrin)
 Bisphenol F epoxy resin
 Cement, portland, chemicals
 Trimethylolpropane triglycidyl ether

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
 The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
 The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substances

n.a.

3.2 Mixtures

Reaction product: bisphenol-A-(epichlorhydrin)	
Registration number (REACH)	01-2119456619-26-XXXX
Index	603-074-00-8
EINECS, ELINCS, NLP, REACH-IT List-No.	500-033-5
CAS	25068-38-6
content %	25-50



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Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Specific Concentration Limits and ATE	Skin Irrit. 2, H315: >=5 % Eye Irrit. 2, H319: >=5 %

Cement, portland, chemicals	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	266-043-4
CAS	65997-15-1
content %	25-50
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Bisphenol F epoxy resin	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	---
CAS	28064-14-4
content %	10-25
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411

Trimethylolpropane triglycidyl ether	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	---
CAS	30499-70-8
content %	5-10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F Aquatic Chronic 2, H411

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	
Registration number (REACH)	01-2119513212-58-XXXX
Index	---
EINECS, ELINCS, NLP, REACH-IT List-No.	219-784-2
CAS	2530-83-8
content %	2,5-10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Eye Dam. 1, H318

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
 The substances named in this section are given with their actual, appropriate classification!



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For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Protect uninjured eye.

Follow-up examination by an ophthalmologist.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

Corrosive burns on skin as well as mucous membrane possible.

Risk of serious damage to eyes.

Corneal damage.

Danger of blindness.

Ingestion:

Pain in the mouth and throat

stomach pain

Oesophageal perforation

Gastric perforation

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of sulphur

Oxides of nitrogen

Toxic gases



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5.3 Advice for firefighters

For personal protective equipment see Section 8.

In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.

Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Ensure sufficient supply of air.

Avoid contact with eyes or skin.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Pick up mechanically and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.



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Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Do not store with oxidizing agents.

Do not store with alkalis.

Do not store with acids.

Protect from direct sunlight and warming.

Protect against moisture and store closed.

Store in a dry place.

Store in a well ventilated place.

Observe special storage conditions.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Cement, portland, chemicals	Content %:25-50
WEL-TWA: 10 mg/m ³ (total inh. dust), 4 mg/m ³ (res. dust)	WEL-STEL: ---	---
Monitoring procedures: ---		
BMGV: ---	Other information: ---	

Reaction product: bisphenol-A-(epichlorhydrin)						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,003	mg/l	
	Environment - marine		PNEC	0,0003	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,018	mg/l	
	Environment - sewage treatment plant		PNEC	10	mg/l	
	Environment - sediment, freshwater		PNEC	0,5	mg/kg dw	
	Environment - sediment, marine		PNEC	0,5	mg/kg dw	
	Environment - soil		PNEC	0,05	mg/kg dw	
	Environment - oral (animal feed)		PNEC	11	mg/kg	
Consumer	Human - dermal	Short term, systemic effects	DNEL	3,571	mg/kg bw/day	



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Consumer	Human - oral	Short term, systemic effects	DNEL	0,75	mg/kg bw/day	
Consumer	Human - oral	Long term, systemic effects	DNEL	0,75	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	0,75	mg/m ³	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	0,75	mg/m ³	
Consumer	Human - dermal	Long term, systemic effects	DNEL	3,6	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	8,33	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	12,25	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,3	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	12,3	mg/m ³	

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,45	mg/l	
	Environment - marine		PNEC	0,045	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	1	mg/l	
	Environment - sediment		PNEC	0,79	mg/kg dry weight	
	Environment - soil		PNEC	0,063	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	8,2	mg/l	
	Environment - sediment, freshwater		PNEC	1,6	mg/kg	
	Environment - sediment, marine		PNEC	0,16	mg/kg	
Consumer	Human - dermal	Short term, systemic effects	DNEL	12,5	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	43,5	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	5	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/day	



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Consumer	Human - inhalation	Long term, systemic effects	DNEL	17	mg/m ³	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	70	mg/m ³	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	21	mg/kg bw/day	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	147	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	10	mg/kg bw/day	



WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU).

(10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14)

= The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

If applicable



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Face protection (EN 166).

Skin protection - Hand protection:

Chemical resistant protective gloves (EN ISO 374).

Recommended

Protective gloves in butyl rubber (EN ISO 374).

Protective gloves made of fluorocarbon rubber (EN ISO 374).

Protective nitrile gloves (EN ISO 374).

Minimum layer thickness in mm:

$\geq 0,5$

Permeation time (penetration time) in minutes:

> 120

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

Normally not necessary.

If air supply is not sufficient, wear protective breathing apparatus.

Thermal hazards:

Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:

Paste, Solid

Colour:

White

Odour:

Characteristic

Melting point/freezing point:

There is no information available on this parameter.



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Boiling point or initial boiling point and boiling range:	There is no information available on this parameter.
Flammability:	Flammable
Lower explosion limit:	Does not apply to solids.
Upper explosion limit:	Does not apply to solids.
Flash point:	>100 °C
Auto-ignition temperature:	No
Decomposition temperature:	There is no information available on this parameter.
pH:	There is no information available on this parameter.
Kinematic viscosity:	90-130 Pas (20°C, Dynamic viscosity)
Solubility:	There is no information available on this parameter.
Partition coefficient n-octanol/water (log value):	Does not apply to mixtures.
Vapour pressure:	There is no information available on this parameter.
Density and/or relative density:	1,5-1,6 g/cm ³ (20°C)
Relative vapour density:	Does not apply to solids.
9.2 Other information	
Explosives:	Product is not explosive.
Oxidizing solids:	No

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

Avoid contact with strong acids.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.



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Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Reaction product: bisphenol-A-(epichlorhydrin)						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>11400	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Skin Irrit. 2
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Sensitising (skin contact)
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Sensitising (skin contact)
Germ cell mutagenicity:					OECD 472 (Genetic Toxicology - Escherichia coli, Reverse Assay)	Negative
Carcinogenicity:				Rat	OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative



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Reproductive toxicity:	NOEL	540	mg/kg		OECD 416 (Two-generation Reproduction Toxicity Study)	
Reproductive toxicity:				Rat	OECD 414 (Prenatal Developmental Toxicity Study)	Negative
Aspiration hazard:						No
Symptoms:						diarrhoea, weight loss
Symptoms:						eyes, reddened, watering eyes

Cement, portland, chemicals						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:						Intensely irritant
Serious eye damage/irritation:						Risk of serious damage to eyes.
Respiratory or skin sensitisation:						Low-chromate
Respiratory or skin sensitisation:						Low-chromate, Not sensitizing
Specific target organ toxicity - single exposure (STOT-SE):						Irritation of the respiratory tract
Symptoms:						mucous membrane irritation
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Irritation of the respiratory tract

Trimethylolpropane triglycidyl ether						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg			
Respiratory or skin sensitisation:				Guinea pig		Yes (skin contact)

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	8025	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by inhalation:	LC50	>5,3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Aerosol
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Human being		No (skin contact)
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Rat	OECD 487 (In Vitro Mammalian Cell Micronucleus Test)	Negative
Germ cell mutagenicity:				Rabbit	in vivo	Negative
Carcinogenicity:	NOAEL	>11,1	mg/kg	Mouse		Negative
Reproductive toxicity (Developmental toxicity):	NOAEL	>=400	mg/kg bw/d	Rabbit	OECD 414 (Prenatal Developmental Toxicity Study)	No indications of such an effect.
Reproductive toxicity (Effects on fertility):	NOAEL	500	mg/kg	Rat	OECD 415 (One-Generation Reproduction Toxicity Study)	No indications of such an effect.
Symptoms:						acidosis, drop in blood pressure, vomiting, headaches, cramps, dizziness, visual disturbances, nausea

11.2. Information on other hazards

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Endocrine disrupting properties:						Does not apply to mixtures.

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Other information:							No other relevant information available on adverse effects on health.
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SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Endocrine disrupting properties:							Does not apply to mixtures.
12.7. Other adverse effects:							No information available on other adverse effects on the environment.

Reaction product: bisphenol-A-(epichlorhydrin)							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance



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12.1. Toxicity to algae:	NOEC/NOEL	72h	2,4	mg/l	Selenastrum capricornutum	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to fish:	LC50	96h	2	mg/l	Leuciscus idus		
12.1. Toxicity to fish:	LC50	96h	1,5	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	1,1	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,3	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	9,4	mg/l	Selenastrum capricornutum	U.S. EPA ECOTOX Database	
12.1. Toxicity to algae:	EC50	96h	220	mg/l	Scenedesmus subspicatus		
12.2. Persistence and degradability:		28d	5	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Not readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		3,242			Regulation (EC) 440/2008 A.8 (PARTITION COEFFICIENT)	
Other information:							Contains organically bound halogens, which may contribute to the AOX value in wastewater.
Toxicity to bacteria:	IC50	3h	>100	mg/l	activated sludge		

Trimethylpropane triglycidyl ether



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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	75	g/l			

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	55	mg/l	Cyprinus carpio	Regulation (EC) 440/2008 C.1 (ACUTE TOXICITY FOR FISH)	
12.2. Persistence and degradability:			6,5	h			Half-life pH = 7, 24.5 °C
hydrolysis							
12.2. Persistence and degradability:			0,15	h			Half-life pH = 5, 24.5 °C
hydrolysis							
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.1. Toxicity to algae:	EC50	96h	350	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:			0,13	h			Half-life pH = 9, 24.5 °C
hydrolysis							
Toxicity to bacteria:	NOEC/NOEL	3h	> 100	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances



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Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. dispose at suitable refuse site.
E.g. suitable incineration plant.
For contaminated packing material
Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.


SECTION 14: Transport information


General statements

14.1. UN number or ID number: 1759

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:
UN 1759 CORROSIVE SOLID, N.O.S. (TRIMETHYLOLPROPANE TRIGLYCIDYL ETHER)

14.3. Transport hazard class(es): 8 

14.4. Packing group: III 

Classification code: C10


LQ: 5 kg


14.5. Environmental hazards: environmentally hazardous

Tunnel restriction code: E

Transport by sea (IMDG-code)

14.2. UN proper shipping name:
CORROSIVE SOLID, N.O.S. (TRIMETHYLOLPROPANE TRIGLYCIDYL ETHER)

14.3. Transport hazard class(es): 8 

14.4. Packing group: III 


EmS: F-A, S-B

Marine Pollutant: Yes

14.5. Environmental hazards: environmentally hazardous

Transport by air (IATA)

14.2. UN proper shipping name:
Corrosive solid, n.o.s. (TRIMETHYLOLPROPANE TRIGLYCIDYL ETHER)

14.3. Transport hazard class(es): 8 

14.4. Packing group: III

14.5. Environmental hazards: Not applicable

14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
All persons involved in transporting must observe safety regulations.
Precautions must be taken to prevent damage.

14.7. Maritime transport in bulk according to IMO instruments

Freighted as packaged goods rather than in bulk, therefore not applicable.
Minimum amount regulations have not been taken into account.
Danger code and packing code on request.
Comply with special provisions.



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SECTION 15: Regulatory information

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

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!

Regulation (EC) No 1907/2006, Annex XVII

Cement, portland, chemicals

Trimethylolpropane triglycidyl ether

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
E2		200	500

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 6 g/l

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

1-16

Employee training in handling dangerous goods is required.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
STOT SE 3, H335	Classification according to calculation procedure.
Eye Dam. 1, H318	Classification according to calculation procedure.
Skin Sens. 1, H317	Classification according to calculation procedure.
Repr. 1B, H360F	Classification according to calculation procedure.



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Aquatic Chronic 2, H411	Classification according to calculation procedure.
Skin Corr. 1C, H314	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H314 Causes severe skin burns and eye damage.
H360F May damage fertility.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H411 Toxic to aquatic life with long lasting effects.

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
Eye Dam. — Serious eye damage
Skin Sens. — Skin sensitization
Repr. — Reproductive toxicity
Aquatic Chronic — Hazardous to the aquatic environment - chronic
Skin Corr. — Skin corrosion
Skin Irrit. — Skin irritation
Eye Irrit. — Eye irritation

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate



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BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BSEF The International Bromine Council

bw body weight

CAS Chemical Abstracts Service

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)

EC European Community

ECHA European Chemicals Agency

ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)

etc. et cetera

EU European Union

EVAl Ethylene-vinyl alcohol copolymer

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

Koc Adsorption coefficient of organic carbon in the soil

Kow octanol-water partition coefficient

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC (Code) International Bulk Chemical (Code)

IMDG-code International Maritime Code for Dangerous Goods

incl. including, inclusive

IUCLID International Uniform Chemical Information Database

IUPAC International Union for Pure Applied Chemistry

LC50 Lethal Concentration to 50 % of a test population

LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)

Log Koc Logarithm of adsorption coefficient of organic carbon in the soil

Log Kow, Log Pow Logarithm of octanol-water partition coefficient

LQ Limited Quantities

MARPOL International Convention for the Prevention of Marine Pollution from Ships

n.a. not applicable

n.av. not available



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n.c. not checked

n.d.a. no data available

NIOSH National Institute for Occupational Safety and Health (USA)

NLP No-longer-Polymer

NOEC, NOEL No Observed Effect Concentration/Level

OECD Organisation for Economic Co-operation and Development

org. organic

OSHA Occupational Safety and Health Administration (USA)

PBT persistent, bioaccumulative and toxic

PE Polyethylene

PNEC Predicted No Effect Concentration

ppm parts per million

PVC Polyvinylchloride

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SVHC Substances of Very High Concern

Tel. Telephone

TOC Total organic carbon

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.