

## HIT-RE 500-SD

Safety information for 2-Component-products

Date of issue: 10/11/2017 Rev

Revision date: 10/11/2017 Super

Supersedes: 18/05/2017

Version: 9.1

## **SECTION 1: Kit identification**

#### **1.1 Product identifier**

Product name



Product code

**BU** Anchor

#### 1.2 Details of the supplier of the Safety information for 2-Component-products

Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong Kowloon - Hong Kong T +852 27734 700 hksales@hilti.com

## **SECTION 2: General information**

Storage

Storage temperature: 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

H360F

H411

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

## **SECTION 3:**

#### **Classification of the Product**

Classification according to the Unit	ed Nations GHS (Rev. 4, 2011)
Skin Corr. 1A	H314
Skin Sens. 1	H317

#### Label elements

Aquatic Chronic 2

Repr. 1B

Labelling according to the United Nations GHS (Rev. 4, 2011)	
Labeling according to the office hadons of to (net. 4, 2011)	

Hazard pictograms (GHS-UN)

	GHS05	GHS07	GHS08	GHS09	
Signal word (GHS-UN)	Danger				
Hazardous ingredients	Epoxy resin, An	nines			
Hazard statements (GHS-UN)	H317 - May cau	ise an allergic sł aquatic life with	ns and eye dama kin reaction. long lasting effe	•	
Precautionary statements (GHS-UN)	P262 - Do not g	et in eyes, on sl	kin, or on clothing	protective gloves. 3. Iy with water for several r	minutes. Remove
10/11/2017 EN (English)					



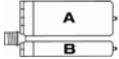
## HIT-RE 500-SD

Safety information for 2-Component-products

contact lenses, if present and easy to do. Continue rinsing. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P302+P352 - IF ON SKIN: Wash with plenty of water.

#### **Additional information**

2-component-foilpack, contains: Component A: Epoxy resin, Reactive diluent, inorganic filler Component B: Amine hardener, inorganic filler



Name	General description	Quantity	Unit	Classification according to the United Nations GHS
HIT-RE 500-SD, A		1	pcs	Skin Corr. 1C, H314 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
HIT-RE 500-SD, B		1	pcs	Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

## **SECTION 4: General advice**

No data available

ECTION 5: Safe handling advid
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vironmental precautions
prage conditions
chnical measures
ecautions for safe handling
thods for cleaning up
r containment
compatible materials
compatible products
vironmental precautions prage conditions chnical measures ecautions for safe handling ethods for cleaning up r containment compatible materials

SECTION 6: First aid measures	
First-aid measures after eye contact	Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open



## HIT-RE 500-SD

Safety information for 2-Component-products

	Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist
First-aid measures after ingestion	Drink plenty of water Do not induce vomiting Rinse mouth. Immediately call a POISON CENTER/doctor
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	Wash with plenty of water/ Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.
First-aid measures general	Never give anything by mouth to an unconscious person If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects	Causes severe skin burns and eye damage.
Symptoms/effects after eye contact	Causes serious eye damage.
Symptoms/effects after inhalation	May cause an allergic skin reaction.
Other medical advice or treatment	Treat symptomatically

## **SECTION 7: Fire fighting measures**

Firefighting instructions	Use water spray or fog for cooling exposed containers Exercise caution when fighting any chemical fire Prevent fire fighting water from entering the environment
Protection during firefighting	Self-contained breathing apparatus Do not enter fire area without proper protective equipment, including respiratory protection
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide Carbon monoxide

## **SECTION 8: Other information**

No data available



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011) Date of issue: 10/11/2017 Version: 8.3

Revision date: 19/05/2017

Supersedes: 14/12/2015

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

1.1. Product identifier	
Product form	Mixture
Product name	HIT-RE 500-SD, B
UN-No. (ADR)	3259
Product code	BU Anchor
1.2. Relevant identified uses of the substa	nce or mixture and uses advised against
Use of the substance/mixture	Composite mortar component for fasteners in the construction industry
1.3. Details of the supplier of the safety da	ta sheet
Supplier Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong Kowloon - Hong Kong T +852 27734 700 hksales@hilti.com	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906310 - F +49 8191 90176310 anchor.hse@hilti.com
1.4. Emergency telephone number	
Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +852 27734 700

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification according to the United Nations GHS (Rev. 4	4, 2011)
Skin Corr. 1A	H314
Skin Sens. 1	H317
Aquatic Acute 3	H402
Aquatic Chronic 3	H412
Full text of hazard classes and H-statements : see section 16	

#### 2.2. Label elements

Labelling according to the United Nations GH	IS (Rev. 4, 2011)
Hazard pictograms (GHS-UN)	GHS05 GHS07
Signal word (GHS-UN)	Danger
Hazard statements (GHS-UN)	H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (GHS-UN)	<ul> <li>P262 - Do not get in eyes, on skin, or on clothing.</li> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice, medical attention.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water.</li> </ul>



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

## 2.3. Other hazards

No additional information available

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
m-Xylylenediamine	(CAS-No.) 1477-55-0	25 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Skin Sens. 1B, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Full text of H-statements: see section 16

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

4.1. Description of first aid measures				
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).			
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.			
First-aid measures after skin contact	Wash with plenty of water/ Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.			
First-aid measures after eye contact	Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.			
First-aid measures after ingestion	Drink plenty of water. Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.			
4.2. Most important symptoms and effects, both acute and delayed				
Symptoms/effects	Causes severe skin burns and eye damage.			
Symptoms/effects after inhalation	May cause an allergic skin reaction.			
Symptoms/effects after eye contact	Causes serious eye damage.			
Potential adverse human health effects and	Based on available data, the classification criteria are not met.			

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

Treat symptomatically.

symptoms

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media

Foam. Dry powder. Carbon dioxide. Water spray. Sand.



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Unsuitable extinguishing media	Do not use a heavy water stream.	
5.2. Special hazards arising from t	he substance or mixture	
No additional information available		
5.3. Advice for firefighters		
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.	
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment including respiratory protection.	
SECTION 6: Accidental release measures		

on i o o o o a proco a do o o o o o o o o o o o o o o o o o	including chick procedures
General measures	Spilled material may present a slipping hazard.
6.1.1.For non-emergency personnel Emergency procedures	Evacuate unnecessary personnel.
6.1.2.For emergency responders Protective equipment Emergency procedures	Use personal protective equipment as required. Equip cleanup crew with proper protection. Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and material for containment and cleaning up		
For containment Collect spillage.		
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away from other materials.	
Other information	Dispose of materials or solid residues at an authorized site.	

SECTION 7: Handling and storage					
7.1. Precautions for safe handling	7.1. Precautions for safe handling				
Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact during pregnancy/while nursing.				
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.				
7.2. Conditions for safe storage, include	ding any incompatibilities				
Technical measures	Comply with applicable regulations.				
Storage conditions	Protect from sunlight. Store in a well-ventilated place.				
Incompatible products	Strong bases. Strong acids.				
Incompatible materials	Sources of ignition. Direct sunlight.				
Storage temperature	5 - 25 °C				
Heat and ignition sources	Keep away from heat and direct sunlight.				



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

## SECTION 8: Exposure controls/personal protection

8.1. Control parameters			
Additional information	The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.		
8.2. Appropriate engineering co	ntrols		
Environmental exposure controls	Avoid release to the environment.		
Consumer exposure controls	Avoid contact during pregnancy/while nursing.		
Other information	Do not eat, drink or smoke during use.		
8.3. Individual protection measures, such as personal protective equipment (PPE)			
Hand protection Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with			

substances may shorten the protective function's effective duration.					
Туре	Material	Permeation	Thickness (mm)	Penetrati on	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN 374
Eye protection Wear security glasses which protect from splashes					
Type	Use	Characteristics	Standard	]	

either mixtures of substances or different

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Skin and body protection

Wear suitable protective clothing



## 8.4. Exposure limit values for the other components

No additional information available

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

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

Physical state	Solid
Appearance	Thixotropic paste.
Colour	red.
Odour	Amine-like.
Odour threshold	No data available
рН	11.5
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.41 g/cm <sup>3</sup> DIN EN ISO 1183-3
Solubility	insoluble in water.
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	50 Pa.s HN-0333
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Corrosive vapours.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available.

#### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified	
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	
m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 oral	660 mg/kg	



## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	2000 mg/kg	
LC50 inhalation rat (Dust/Mist - mg/l/4h)	1.34 mg/l/4h	
Skin corrosion/irritation	Causes severe skin burns and eye damage.	
	рН: 11.5	
Serious eye damage/irritation	Serious eye damage, category 1, implicit	
	рН: 11.5	
Respiratory or skin sensitisation	May cause an allergic skin reaction.	
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive toxicity	Not classified	
STOT-single exposure	Not classified	
STOT-repeated exposure	Not classified	
Aspiration hazard	Not classified	
HIT-RE 500-SD, B		
Viscosity, kinematic	35460.9929078 mm²/s	
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.	

<b>SECTION 12: Ecological information</b>	١

## 12.1. Toxicity

Ecology - water	Harmful to aquatic life with long lasting effects.
Acute aquatic toxicity	Harmful to aquatic life.
Chronic aquatic toxicity	Harmful to aquatic life with long lasting effects.
m-Xylylenediamine (1477-55-0)	
LC50 fish 1	75 mg/l
LC50 other aquatic organisms 1	20.3 ppb
EC50 Daphnia 1	15 mg/l
LOEC (chronic)	15 mg/l
NOEC (acute)	10.5 mg/kg
NOEC (chronic)	4.7 mg/l
NOEC chronic crustacea	4.7 mg/l

#### 12.2. Persistence and degradability

HIT-RE 500-SD, B	
Persistence and degradability	May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative potential

HIT-RE 500-SD, B	
Bioaccumulative potential	Not established.

## 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

EN (English)

Ozone	Not classified
Other adverse effects	No additional information available
Other information	Avoid release to the environment.



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste)

Product/Packaging disposal recommendations

Disposal must be done according to official regulations.

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/recycling.

Ecology - waste materials

Avoid release to the environment.

## **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number			
3259	3259	3259	3259
14.2. UN proper shipping nar	ne		
AMINES, SOLID, CORROSIVE, N.O.S.	AMINES, SOLID, CORROSIVE, N.O.S.	Amines, solid, corrosive, n.o.s.	AMINES, SOLID, CORROSIVE, N.O.S.
Transport document descript	tion		
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II		
14.3. Transport hazard class	(es)		
8	8	8	8
	8	8	8
14.4. Packing group	14.4. Packing group		
	11	Ш	Ш
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
	No supplementary	information available	•

#### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Packing instructions (ADR) Mixed packing provisions (ADR) Orange plates



C8

Е

Tunnel restriction code (ADR)



## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

- Transport by sea	
Special provisions (IMDG)	274
Limited quantities (IMDG)	1 kg
Packing instructions (IMDG)	P002
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-B
Stowage category (IMDG)	A
Stowage and segregation (IMDG)	Separated from' acids.
MFAG-No	154
- Air transport	
PCA packing instructions (IATA)	859
PCA max net quantity (IATA)	15kg
CAO packing instructions (IATA)	863
Special provisions (IATA)	A3
- Rail transport	
Special provisions (RID)	274
Limited quantities (RID)	1kg
Packing instructions (RID)	P002, IBC08
Carriage prohibited (RID)	No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## **SECTION 15: Regulatory information**

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

No additional information available

	SECTION 16: Other information				
	SDS Major/Minor			None	
	Date	of issue		10/11/2017	
	Revision date		9	19/05/2017	
	Supersedes			14/12/2015	
Other information None.			None.		
	Full text of H-statements:				
		H302	Harmful if swallowed.		
		H312	Harmful in contact with skin.		

11302	Hammul II Swalloweu.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects.

#### SDS\_UN\_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011) Date of issue: 19/05/2017 Version: 9.1

Revision date: 10/11/2017

Supersedes: 19/05/2017

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

1.1. Product identifier				
Product form	Mixture			
Product name	HIT-RE 500-SD, A			
Product code	BU Anchor			
1.2. Relevant identified uses of the substant	nce or mixture and uses advised against			
Use of the substance/mixture	Composite mortar component for fasteners in the construction industry			
1.3. Details of the supplier of the safety data sheet				
nor botano er ine cappiler er ine calety aa				
Supplier	Department issuing data specification sheet			
<b>Supplier</b> Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6			
Supplier Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland			
Supplier Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong Kowloon - Hong Kong	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906310 - F +49 8191 90176310			
Supplier Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland			

### 1.4. Emergency telephone number

Emergency number

Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +852 27734 700

## **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

### Classification according to the United Nations GHS (Rev. 4, 2011)

Skin Corr. 1C Skin Sens. 1	H314 H317
Repr. 1B	H360
Aquatic Acute 2	H401
Aquatic Chronic 2	H411
Full text of hazard classes and H-statements : see section 16	

### 2.2. Label elements

Labelling according to the United Nations GHS (Rev. 4, 2011)		
Hazard pictograms (GHS-UN)		
	GHS05 GHS07 GHS08 GHS09	
Signal word (GHS-UN)	Danger	
Hazardous ingredients	Bisphenol-A-Epichlorhydrin Epoxy resin Average MW < 700 ; Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol ; Reaction products of hexane-1,6-diol with 2-(chloromethyl); 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	
Hazard statements (GHS-UN)	H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H360 - May damage fertility H411 - Toxic to aquatic life with long lasting effects.	
Precautionary statements (GHS-UN)	P262 - Do not get in eyes, on skin, or on clothing.	
10/11/2017 EN (English)	12/20	



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice, medical attention.
P337+P313 - If eye irritation persists: Get medical advice, medical attention.
P302+P352 - IF ON SKIN: Wash with plenty of water.

#### 2.3. Other hazards

No additional information available

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
Bisphenol-A-Epichlorhydrin Epoxy resin Average MW < 700	(CAS-No.) 25068-38-6	25 - 40	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3- epoxypropane and phenol	(CAS-No.) 9003-36-5	10 - 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	(CAS-No.) 933999-84-9	10 - 25	Flam. Liq. Not classified Acute Tox. 5 (Oral), H303 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2- (chloromethyl)oxirane	(CAS-No.) 30499-70-8	5 - 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

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

4.1. Description of first aid measures	
First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get immediate medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Drink plenty of water. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

4.2. Most important symptoms and effect Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
4.3. Indication of any immediate medica	I attention and special treatment needed
-	Il attention and special treatment needed
-	Il attention and special treatment needed
Treat symptomatically.	
Treat symptomatically. SECTION 5: Firefighting measure	
<ul> <li>4.3. Indication of any immediate medica Treat symptomatically.</li> <li>SECTION 5: Firefighting measure</li> <li>5.1. Extinguishing media</li> </ul>	
Treat symptomatically. SECTION 5: Firefighting measure	

## 5.2. Special hazards arising from the substance or mixture

No additional information available

# 5.3. Advice for firefighters Firefighting instructions Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting

Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

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

6.1. Personal precautions, protective equipment and emergency procedures		
General measures	Spilled material may present a slipping hazard.	
6.1.1.For non-emergency personnel		
Emergency procedures	Evacuate unnecessary personnel.	
6.1.2.For emergency responders		
Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.	
Emergency procedures	Ventilate area.	

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment. Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. After curing, the product can be disposed of with household waste.

6.3. Methods and material for containment and cleaning up		
For containment	Collect spillage.	
Methods for cleaning up	This material and its container must be disposed of in a safe way, and as per local legislation. Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away from other materials.	
Other information	Dispose of materials or solid residues at an authorized site.	



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

<b>SECTION 7: Handling and stora</b>	age
7.1. Precautions for safe handling	
Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, inclu	ding any incompatibilities
Storage conditions	Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 - 25 °C
Heat and ignition sources	Keep away from heat and direct sunlight.

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

### 8.1. Control parameters

Additional information	The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.
8.2. Appropriate engineering controls	S
Environmental exposure controls	Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.
8.3. Individual protection measu	res, such as personal protective equipment (PPE)

Туре	Material	Permeation	Thickness (mm)	Penetrati on	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4		EN 374
Eve protection		Wear security glasses which protect from			

Eye protection

Hand protection

Wear security glasses which protect from splashes

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170
Skin and body		Wear suitable protective clothing	

Skin and body protection



10/11/2017



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 8.4. Exposure limit values for the other components

No additional information available

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

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

Physical state	Solid
Appearance	Thixotropic paste.
Colour	Light grey.
Odour	characteristic.
Odour threshold	No data available
рН	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.46 g/ml DIN EN ISO 1183-3
Solubility	insoluble in water.
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	43 Pa.s HN-0333
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

#### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10/11/2017



Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Bisphenol-A-Epichlorhydrin Epoxy re	sin Average MW < 700 (25068-38-6)
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
Formaldehyde, oligomeric reaction p	roducts with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)
LD50 oral rat	> 5000 mg/kg bodyweight (Rat; ECHA)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; ECHA)
Reaction products of hexane-1,6-diol	
LD50 oral rat	3010 mg/kg
LD50 dermal rat	> 2000 mg/kg
Skin corrosion/irritation	Causes severe skin burns and eye damage.
Serious eye damage/irritation	Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	May damage fertility
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
HIT-RE 500-SD, A	
Viscosity, kinematic	29452.05479452 mm <sup>2</sup> /s

Potential adverse human health effects and symptoms

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

## **SECTION 12: Ecological information**

Ecology - water Toxic to aquatic life with long lasting effects.			
Acute aquatic toxicity Toxic to aquatic life.			
Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.			
Bisphenol-A-Epichlorhydrin Epoxy resin Average MW < 700 (25068-38-6)			
LC50 fish 1 1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal)			
EC50 Daphnia 1 1.7 mg/l			
LC50 fish 2 2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)			
Threshold limit algae 1	> 11 mg/l (72 h; Scenedesmus sp.)		
Threshold limit algae 2	4.2 mg/l (72 h; Scenedesmus sp.)		

12.1 Toxicity



## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9)		
LC50 fish 1	30 mg/l	
LC50 other aquatic organisms 1	23.1 mg/l	
EC50 Daphnia 1	47 mg/l	
NOEC (acute)	18 mg/l	

### 12.2. Persistence and degradability

HIT-RE 500-SD, A	
Persistence and degradability	May cause long-term adverse effects in the environment.

### 12.3. Bioaccumulative potential

HIT-RE 500-SD, A		
Bioaccumulative potential	Not established.	
Bisphenol-A-Epichlorhydrin Epoxy resin Average MW < 700 (25068-38-6)		
BCF other aquatic organisms 1 3 - 31		
Log Pow >= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).	

## 12.4. Mobility in soil

Surface tension 0.0 587-0.0589	0.0 587-0.0589,20 °C		
Log Pow See section 12	See section 12.1 on ecotoxicology		

## 12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available
Other information	Avoid release to the environment.

## SECTION 13: Disposal considerations

13.1. Waste treatment methods				
Regional legislation (waste)	Disposal must be done according to official regulations.			
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Avoid release to the environment, Refer to manufacturer/supplier for information on recovery/ recycling.			
Ecology - waste materials	Avoid release to the environment.			

## **SECTION 14: Transport information**

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	ΙΑΤΑ	RID	
14.1. UN number				
Not regulated for transport				
14.2. UN proper shipping nam	e			
Not applicable	Not applicable	Not applicable	Not applicable	
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	
Not applicable	Not applicable	Not applicable	Not applicable	
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	



## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

ADR	IMDG	ΙΑΤΑ	RID
14.5. Environmental hazards			
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
Environmentally hazardous substances derogation applies (quantity of liquids ≤ 5 litres or net mass of solids ≤ 5 kg)			
not restricted according ADR Special Provision SP375, IATA-DGR Special Provision A197 and IMDG-Code 2.10.2.7			

## 14.6. Special precautions for user

- Overland transport	
Special provisions (ADR)	375
- Transport by sea No data available	
- Air transport	
Special provisions (IATA)	A197
- Rail transport Carriage prohibited (RID)	No

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

## **SECTION 15: Regulatory information**

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

No additional information available

SECTION 16: Other information		
None		
19/05/2017		
10/11/2017		
19/05/2017		
ĺ	None 19/05/2017 10/11/2017	

## Indication of changes:

[	Section	Changed item	Change	Comments
	3	Composition/information on ingredients	Modified	

Other information

None.

### Full text of H-statements:

H303	May be harmful if swallowed
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H401	Toxic to aquatic life



## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

H402	Harmful to aquatic life
	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

#### SDS\_UN\_Hilti

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product