

## **HIT-RE 100**

Safety information for 2-Component-products

Issue date: 09/05/2023

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Supersedes: 11/05/2020

Version: 3.1

#### **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, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway TX 75024 Plano - USA T +1 9724035800 1-800-879-8000 toll free - F +1 918 254 0522

#### **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

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

Epoxy resin, Amines

#### **SECTION 3: Kit contents**

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

#### **GHS-US** classification

Acute Tox. 4 (Oral)	H302 - Harmful if swallowed.
Skin Corr. 1B	H314 - Causes severe skin burns and eye damage.
Eye Dam. 1	H318 - Causes serious eye damage.
Skin Sens. 1	H317 - May cause an allergic skin reaction.
Muta. 2	H341 - Suspected of causing genetic defects.
Repr. 1B	H360 - May damage fertility or the unborn child.
Aquatic Chronic 2	H411 - Toxic to aquatic life with long lasting effects.

#### Label elements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) Hazardous ingredients

09/05/2023

US-OSHA - en



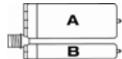
# HIT-RE 100

#### Safety information for 2-Component-products

Hazard statements (GHS US)	Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May damage fertility or the unborn child. Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS US)	Wear eye protection, protective clothing, protective gloves. Do not get in eyes, on skin, or on clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. 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	GHS-US classification
HIT-RE 100, A		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Chronic 2, H411
HIT-RE 100, B		1	pcs (pieces)	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412

#### **SECTION 4: General advice**

General advice

For professional users only

SECTION 5: Safe handling advice	
General measures	Spilled material may present a slipping hazard
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.
Storage conditions	Protect from sunlight. Store in a well-ventilated place.
Technical measures	Comply with applicable regulations
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



## HIT-RE 100 Safety information for 2-Component-products

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.
For containment	Collect spillage.
Incompatible materials	Sources of ignition Direct sunlight
Incompatible products	Strong bases Strong acids

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 Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist
First-aid measures after ingestion	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 skin contact	May cause an allergic skin reaction.

#### 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



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## **SECTION 1: Identification**

1.1. Identification			
Product form	Mixture		
Product name	HIT-RE 100, B		
Product code	BU Anchor		
1.2. Recommended use and restrictions or	n use		
Recommended use	Composite mortar component for fasteners in the construction industry		
Restrictions on use	For professional use only		
1.3. Supplier			
Supplier	Department issuing data specification sheet		
Hilti, Inc.	Hilti Entwicklungsgesellschaft mbH		
Legacy Tower, Suite 1000	Hiltistraße 6		
7250 Dallas Parkway	Kaufering, 86916		
Plano, TX 75024	Deutschland		
USA	T +49 8191 906876		
T +1 9724035800	anchor.hse@hilti.com		
1-800-879-8000 toll free - F +1 918 254 0522			
1.4. Emergency telephone number			
Emergency number	Chem-Trec		
Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)			
	Tel.: 703 527 3887 (Other countries)		
	+1 918 8723000		
	1-800-879-8000 toll free		

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Acute toxicity (oral), Category 4	H302
Skin corrosion/irritation, Category 1B	H314
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H-statements: see section 16	

Harmful if swallowed.	
Causes severe skin burns and eye damage.	
May cause an allergic skin reaction.	
Harmful to aquatic life with long lasting effects.	

#### 2.2. GHS Label elements, including precautionary statements

#### GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US)

Danger H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.



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	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (GHS US)	P280 - Wear eye protection, protective clothing, protective gloves.
	P262 - Do not get in eyes, on skin, or on clothing.
	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/attention.
	P337+P313 - If eye irritation persists: Get medical advice/attention.
	P302+P352 - If on skin: Wash with plenty of water.
	, ,

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
m-Xylylenediamine	CAS-No.: 1477-55-0	25 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412
Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene	CAS-No.: 710292-85- 6	10 - 25	Skin Sens. 1B, H317
Quartz (SiO2)	CAS-No.: 14808-60-7	10 - 25	Carc. 1A, H350
resorcinol	CAS-No.: 108-46-3	0,1 - 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 1, H370 STOT SE 2, H371 Aquatic Acute 1, H400 Aquatic Chronic 3, H412

Full text of hazard classes and 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.



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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	Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.
4.2. Most important symptoms and effect	s (acute and delayed)
Potential adverse human health effects and	No additional information available.
symptoms	
Symptoms/effects	Causes severe skin burns and eye damage.
Symptoms/effects after skin contact	May cause an allergic skin reaction.
Symptoms/effects after eye contact	Causes serious eye damage.

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

#### SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing	media		
Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.		
Unsuitable extinguishing media	Do not use a heavy water stream.		
5.2. Specific hazards arising from the chemi	ical		
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.		
5.3. Special protective equipment and precautions for fire-fighters			
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 Evacuate unnecessary personnel. Emergency procedures Evacuate unnecessary personnel. 6.1.2. For emergency responders Use personal protective equipment as required. Equip cleanup crew with proper protection. 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.



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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.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and sto	prage
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, including 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	41 – 77 °F
Heat and ignition sources	Keep away from heat and direct sunlight.

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

#### 8.1. Control parameters

HIT-RE 100, B	
USA - ACGIH - Occupational Exposure Lim	its
Local name	Resorcinol
ACGIH OEL TWA	3 mg/m³ (I - Inhalable particulate matter)
ACGIH OEL TWA [ppm]	10 ppm
ACGIH OEL STEL [ppm]	20 ppm
ACGIH OEL C [ppm]	0.018 ppm
Remark (ACGIH)	TLV® Basis: Eye & skin irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2023
Formaldehyde, telomer with 1,3-benze	enedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)
No additional information available	
resorcinol (108-46-3)	
USA - ACGIH - Occupational Exposure Lim	its
Local name	Resorcinol
ACGIH OEL TWA [ppm]	10 ppm



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resorcinol (108-46-3)					
ACGIH OEL STEL [ppm]	20 ppm				
Remark (ACGIH)		Eye & skin irr			
Regulatory reference		ACGIH 2023			
m-Xylylenediamine (14	177-55-0)				
USA - ACGIH - Occupatio	nal Exposure Limits				
Local name		m-Xylene α,α'-diamine			
ACGIH OEL C [ppm]		0.018 ppm			
Remark (ACGIH)		Eye, skin, & GI irr			
Regulatory reference		ACGIH 2023			
Quartz (SiO2) (14808-6	0-7)	<u>.</u>			
USA - ACGIH - Occupational Exposure Limits					
Local name		Silica crystaline - quartz			
ACGIH OEL TWA		0.025 mg/m <sup>3</sup> (Respirable fraction	on)		
Remark (ACGIH) TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinoger		ted Human Carcinogen)			
Regulatory reference		ACGIH 2022			
USA - OSHA - Occupation	nal Exposure Limits				
Local name		Silica, crystalline quartz, respirable dust			
Remark (OSHA)		(3) See Table Z-3.			
Additional information	Additional information       The product has a pasty consistency. Exposure limit values for respirable dusts are not released for this product.			respirable dusts are not relevant	
8.2. Appropriate engine					
		Ensure good ventilation of the work station. Avoid release to the environment.			
-	on measures/Personal				
Personal protective equip					
Hand protection:					
		maximum wearing time! Genera otective function's effective durat		nust be reduced	. Contact with either mixtures of
Туре	Material	Permeation Thickness (mm)		m)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes) > 0,4			
Eye protection:					
Wear security glasses which protect from splashes					
Туре		Field of application		Characteristics	
Safety glasses Droplet		Droplet	clear		
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#### Skin and body protection:

Long sleeved protective clothing

#### Personal protective equipment symbol(s):



#### Other information:

Do not eat, drink or smoke during use.

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

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

5.1. Information on basic physical and chemic	ai properties
Physical state	Solid
Appearance	Thixotropic paste.
Colour	Red-brown to black
Odour	Amine-like
Odour threshold	No data available
рН	11.5
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	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/cm3 DIN EN ISO 1183-3
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	43 – 57 Pa·s HN-0333
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	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.

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#### 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)	Harmful if swallowed.	
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	
HIT-RE 100, B		
ATE US (oral)	1706.776 mg/kg bodyweight	
Formaldehyde, telomer with 1,3-benzenedime	thanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)	
LD50 oral rat	> 2000 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
resorcinol (108-46-3)		
LD50 oral	301 mg/kg	
LD50 dermal	2830 mg/kg	
LC50 Inhalation - Rat (Dust/Mist)	5.3 mg/l/4h	
m-Xylylenediamine (1477-55-0)		
LD50 oral rat	1090 mg/kg	
LD50 dermal rat	> 3100 mg/kg	
LD50 dermal	> 3100 mg/kg	
LC50 Inhalation - Rat (Dust/Mist)	1.34 mg/l/4h	
Skin corrosion/irritation	Causes severe skin burns.	
	pH: 11.5	
Serious eye damage/irritation	Assumed to cause serious eye damage	
	pH: 11.5	
Respiratory or skin sensitisation	May cause an allergic skin reaction.	
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
resorcinol (108-46-3)		
IARC group	3 - Not classifiable	



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Quartz (SiO2) (14808-60-7)		
IARC group	1 - Carcinogenic to humans	
National Toxicology Program (NTP) Status	Known Human Carcinogens	
Reproductive toxicity	Not classified	
STOT-single exposure	Not classified	
resorcinol (108-46-3)		
STOT-single exposure	Causes damage to organs (central nervous system, blood) (oral). May cause damage to organs (respiratory system) (oral).	
STOT-repeated exposure	Not classified	
Aspiration hazard	Not classified	
Viscosity, kinematic	No data available	
Potential adverse human health effects and symptoms	No additional information available.	
Symptoms/effects	Causes severe skin burns and eye damage.	
Symptoms/effects after skin contact	May cause an allergic skin reaction.	
Symptoms/effects after eye contact	Causes serious eye damage.	

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

12	.1.	Toxicity

12.1. Toxicity			
Ecology - water	logy - water Harmful to aquatic life with long lasting effects.		
Formaldehyde, telomer with 1,3-benze	enedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)		
LC50 - Fish [1]	≥ 50 mg/l		
LC50 - Other aquatic organisms [1]	≥ 31.8 mg/l		
EC50 - Crustacea [1]	2.4 mg/l		
NOEC chronic algae	6.25 mg/l		
resorcinol (108-46-3)			
EC50 - Crustacea [1]	1.28 mg/l		
m-Xylylenediamine (1477-55-0)			
LC50 - Fish [1]	75 mg/l		
LC50 - Other aquatic organisms [1]	20.3 ppb		
EC50 - Crustacea [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 100, B			
Persistence and degradability	May cause long-term adverse effects in the environment.		
Persistence and degradability	May cause long-term adverse effects in the environment.		



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Not rapidly degradable         Quartz (SiO2) (14808-60-7)         Not rapidly degradable         Persistence and degradability       Biodegradability: not applicable.         Chemical oxygen demand (COD)       Not applicable (inorganic)         ThOD       Not applicable (inorganic)         ThOD       Not applicable (inorganic) <b>11.3. Bioaccumulative potential</b> Not applicable (inorganic)         HIT-RE 100, B       Bioaccumulative potential         Bioaccumulative potential       Not established.         Formaldehyde, telomer with 1,3-benzenediometime, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       No bioaccumulation data available.         12.4. Mobility in soil       No bioaccumulation data available.         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Moi delease to the environment.	m-Xylylenediamine (1477-55-0)		
Not rapidly degradable         Persistence and degradability       Biodegradability: not applicable.         Chemical oxygen demand (COD)       Not applicable (inorganic)         ThOD       Not applicable (inorganic) <b>12.3. Bioaccumulative potential</b> Not applicable (inorganic) <b>HIT-RE 100, B</b> Bioaccumulative potential         Bioaccumulative potential       Not established. <b>Formaldehyde, telomer with 1,3-benzenedimettrammine, 1,3-benzenediol and ethenylbenzene (710292-85-6)</b> Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       No bioaccumulation data available. <b>12.4. Mobility in soil</b> No bioaccumulation data available.         Quartz (SiO2) (14808-60-7)       No data available in the literature         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil. <b>12.5. Other adverse effects</b> Surface tension	Not rapidly degradable		
Persistence and degradability         Biodegradability: not applicable.           Chemical oxygen demand (COD)         Not applicable (inorganic)           ThOD         Not applicable (inorganic) <b>12.3. Bioaccumulative potential</b> Inorganic) <b>12.3. Bioaccumulative potential</b> Not established. <b>Formaldehyde, telomer with 1,3-benzenediomethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)</b> Bioconcentration factor (BCF REACH)         ≥ 12.9           Partition coefficient n-octanol/water (Log Pow)         5.14           Quartz (SiO2) (14808-60-7)         No bioaccumulation data available. <b>12.4. Mobility in soil</b> No data available in the literature           Guartz (siO2) (14808-60-7)         Low potential for mobility in soil. <b>12.4. Mobility as oli</b> No data available in the literature           Surface tension         No data available in the literature           Ecology - soil         Low potential for mobility in soil.	Quartz (SiO2) (14808-60-7)		
Chemical oxygen demand (COD)       Not applicable (inorganic)         ThOD       Not applicable (inorganic) <b>12.3. Bioaccumulative potential</b> Not applicable (inorganic) <b>11.RE 100, B</b> Bioaccumulative potential         Not established.       Not established. <b>Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)</b> Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       Bioaccumulation data available. <b>12.4. Mobility in soil</b> No data available in the literature         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil. <b>12.5. Other adverse effects</b> Surface tension	Not rapidly degradable		
ThOD       Not applicable (inorganic)         12.3. Bioaccumulative potential       Intraction (accumulative potential)         HIT-RE 100, B       Bioaccumulative potential         Rormaldehyde, telomer with 1,3-benzenedimethrammine, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       Bioaccumulative potential         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       Quartz (SiO2) (14808-60-7)         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Low potential for mobility in soil.	Persistence and degradability	Biodegradability: not applicable.	
12.3. Bioaccumulative potential         HIT-RE 100, B         Bioaccumulative potential       Not established.         Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       Bioaccumulative potential         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       No data available in the literature         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Low potential for mobility in soil.	Chemical oxygen demand (COD)	Not applicable (inorganic)	
HIT-RE 100, B         Bioaccumulative potential       Not established.         Formaldehyde, telomer with 1,3-benzenedimet+anamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       Bioaccumulative potential         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       Quartz (SiO2) (14808-60-7)         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Hot potential for mobility in soil.	ThOD	Not applicable (inorganic)	
Bioaccumulative potential       Not established.         Formaldehyde, telomer with 1,3-benzenedimetrammine, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       No bioaccumulation data available.         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       Quartz (SiO2) (14808-60-7)         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Low potential for mobility in soil.	12.3. Bioaccumulative potential		
Formaldehyde, telomer with 1,3-benzenedimettamamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)         Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       No bioaccumulation data available.         Bioaccumulative potential       No bioaccumulation data available.         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Volta available in soil.	HIT-RE 100, B		
Bioconcentration factor (BCF REACH)       ≥ 12.9         Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       Quartz (SiO2) (14808-60-7)         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Low potential for mobility in soil.	Bioaccumulative potential	Not established.	
Partition coefficient n-octanol/water (Log Pow)       5.14         Quartz (SiO2) (14808-60-7)       No bioaccumulation data available.         Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       Quartz (SiO2) (14808-60-7)         Quartz (SiO2) (14808-60-7)       No data available in the literature         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       Volume adverse effects	Formaldehyde, telomer with 1,3-benzenedi	methanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)	
Quartz (SiO2) (14808-60-7)     No bioaccumulation data available.       Bioaccumulative potential     No bioaccumulation data available.       12.4. Mobility in soil     No data available in the literature       Quartz (SiO2) (14808-60-7)     No data available in the literature       Surface tension     No data available in the literature       Ecology - soil     Low potential for mobility in soil.       12.5. Other adverse effects	Bioconcentration factor (BCF REACH) ≥ 12.9		
Bioaccumulative potential       No bioaccumulation data available.         12.4. Mobility in soil       12.4. Mobility in soil         Quartz (SiO2) (14808-60-7)       Surface tension         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects       12.5. Other adverse effects	Partition coefficient n-octanol/water (Log Pow) 5.14		
12.4. Mobility in soil         Quartz (SiO2) (14808-60-7)         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects	Quartz (SiO2) (14808-60-7)		
Quartz (SiO2) (14808-60-7)         Surface tension       No data available in the literature         Ecology - soil       Low potential for mobility in soil.         12.5. Other adverse effects	Bioaccumulative potential	No bioaccumulation data available.	
Surface tension     No data available in the literature       Ecology - soil     Low potential for mobility in soil.       12.5. Other adverse effects	12.4. Mobility in soil		
Ecology - soil     Low potential for mobility in soil.       12.5. Other adverse effects	Quartz (SiO2) (14808-60-7)		
12.5. Other adverse effects	Surface tension No data available in the literature		
	Ecology - soil Low potential for mobility in soil.		
Other information Avoid release to the environment.	12.5. Other adverse effects		
	Other information	Avoid release to the environment.	
	SECTION 13: Disposal consideration	ons	

#### 13.1. Disposal methods

Regional legislation (waste) Product/Packaging disposal recommendations

#### Disposal must be done according to official regulations. After curing, the product can be disposed of with household waste. . Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID					
ADR IMDG IATA RID					
14.1. UN number or ID number					
UN 3259 UN 3259 UN 3259 UN 3259					

Avoid release to the environment.



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ADR	IMDG	ΙΑΤΑ	RID
14.2. UN proper shipping nam	e		
AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)	Amines, solid, corrosive, n.o.s. (m- Xylylenediamine)	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine)
Transport document description			
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	UN 3259 Amines, solid, corrosive, n.o.s. (m-Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m- Xylylenediamine), 8, II
14.3. Transport hazard class(e	es)		
8	8	8	8
B	B	8	B
14.4. Packing group	I		
II	II	II	II
14.5. Environmental hazards			I
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 availa	able		
14.6. Special precautions for u	Jser		
Overland transport			
Classification code (ADR)	C8		
Special provisions (ADR)	274		
Limited quantities (ADR)	1kg		
Packing instructions (ADR)	P002, IBC08		
Mixed packing provisions (ADR)	MP10		
Transport category (ADR)	2		
Orange plates	80		
Tunnel restriction code (ADR)	3259 E		
Transport by sea			
Special provisions (IMDG)	274		
Limited quantities (IMDG)	1 kg		
Packing instructions (IMDG)	P002		
EmS-No. (Fire)	F-A		
	S-B		
EmS-No. (Spillage) Stowage category (IMDG)	S-в A		
MFAG-No	A 154		
	IUT		
Air transport			
PCA packing instructions (IATA)	859		

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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	

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

## resorcinol (108-46-3)

CERCLA RQ

5000 lb

#### 15.2. International regulations

#### Quartz (SiO2) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### **SECTION 16: Other information**

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Revision date	05/09/2023
Other information	None.

Full text of H	Full text of H-statements	
H302	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.	
H332	Harmful if inhaled.	
H350	May cause cancer.	
H370	Causes damage to organs.	



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Full text of H-state	Full text of H-statements	
H371	May cause damage to organs.	
H400	Very toxic to aquatic life.	
H412	Harmful to aquatic life with long lasting effects.	

Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	

NFPA health hazard

3 - Materials that, under emergency conditions, can cause serious or permanent injury. 1 - Materials that must be preheated before ignition can occur.



NFPA fire hazard

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#### NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.

SDS\_US\_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.



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## **SECTION 1: Identification**

1.1. Identification		
Product form	Mixture	
Product name	HIT-RE 100, A	
Product code	BU Anchor	
1.2. Recommended use and restrictions on	use	
Recommended use	Composite mortar component for fasteners in the construction industry	
Restrictions on use	For professional use only	
1.3. Supplier		
Supplier	Department issuing data specification sheet	
Hilti, Inc.	Hilti Entwicklungsgesellschaft mbH	
Legacy Tower, Suite 1000	Hiltistraße 6	
7250 Dallas Parkway	Kaufering, 86916	
Plano, TX 75024	Deutschland	
USA	T +49 8191 906876	
T +1 9724035800	anchor.hse@hilti.com	
1-800-879-8000 toll free - F +1 918 254 0522		
1.4. Emergency telephone number		
Emergency number	Chem-Trec	
	Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)	
	Tel.: 703 527 3887 (Other countries)	
	+1 918 8723000	
	1-800-879-8000 toll free	

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Skin corrosion/irritation, Category 1C	H314	Causes severe skin burns and eye damage.
		, , , , , , , , , , , , , , , , , , , ,
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341	Suspected of causing genetic defects.
Reproductive toxicity, Category 1B	H360	May damage fertility
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.
Full text of H-statements: see section 16		

#### 2.2. GHS Label elements, including precautionary statements

#### GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) Hazard statements (GHS US)

H314 - Causes severe skin burns and eye damage.



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	H317 - May cause an allergic skin reaction.
	H341 - Suspected of causing genetic defects.
	H360 - May damage fertility
	H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS US)	P280 - Wear eye protection, protective clothing, protective gloves.
	P262 - Do not get in eyes, on skin, or on clothing.
	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/attention.
	P337+P313 - If eye irritation persists: Get medical advice/attention.
	P302+P352 - If on skin: Wash with plenty of water.

#### 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

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

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Quartz (SiO2)	CAS-No.: 14808-60-7	25 - 40	Carc. 1A, H350
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3	25 - 40	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
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
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	CAS-No.: 933999-84- 9	10 - 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 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. 1B, H317 Repr. 1B, H360 Aquatic Chronic 2, H411

Full text of hazard classes and 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).



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First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. 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. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects	(acute and delayed)
Potential adverse human health effects and symptoms	No additional information available.
Symptoms/effects after skin contact	Causes skin irritation. May cause an allergic skin reaction

## Symptoms/effects after eye contact Causes serious eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

#### SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing	media		
Suitable extinguishing media	Water spray. Carbon dioxide. Dry powder. Foam. Sand.		
Unsuitable extinguishing media	Do not use a heavy water stream.		
5.2. Specific hazards arising from the chemical			
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.		
5.3. Special protective equipment and precautions for fire-fighters			
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.



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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.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

7.1. Precautions for safe handling	
Precautions for safe handling	Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and othe 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, including any incompatibilities

Storage conditions	Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	41 – 77 °F
Heat and ignition sources	Keep away from heat and direct sunlight.

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

#### 8.1. Control parameters

HIT-RE 100, A		
USA - ACGIH - Occupational Exposure Limits		
Local name	Silica crystaline - quartz	
ACGIH OEL TWA	0.025 mg/m³ (R - Respirable particulate matter)	
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)	
Regulatory reference	ACGIH 2021	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
No additional information available		
Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9)		
No additional information available		
Quartz (SiO2) (14808-60-7)		
USA - ACGIH - Occupational Exposure Limits		
Local name	Silica crystaline - quartz	
ACGIH OEL TWA	0.025 mg/m³ (Respirable fraction)	
Remark (ACGIH)	TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)	
Regulatory reference	ACGIH 2022	
05/00/2022 EN (English)	20/20	



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Quartz (SiO2) (14808-60-7)					
USA - OSHA - Occupational Exposure Limits					
Local name		Silica, crystalline quartz, respirable dust			
Remark (OSHA)		(3) See Table Z-3.			
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)					
No additional information	available				
Formaldehyde, oligo	meric reaction product	s with 1-chloro-2,3-epoxy	propane and ph	enol (9003-36	-5)
No additional information	available				
Additional information		The product has a pasty configuration for this product.	onsistency. Exposur	e limit values for	r respirable dusts are not relevant
8.2. Appropriate eng	ineering controls				
Appropriate engineering		Ensure good ventilation of			
Environmental exposure	controls	Avoid release to the enviro	onment.		
8.3. Individual protect	tion measures/Person	al protective equipment			
Personal protective equ Safety glasses. Gloves. A	uipment: Avoid all unnecessary expos	sure. Protective clothing.			
Hand protection:					
	-	he maximum wearing time! Ge protective function's effective	• • •	must be reduced	d. Contact with either mixtures of
Туре	Material	Permeation	Thickness (m	ım)	Penetration
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4	> 0,4	
Eye protection:					·
Wear security glasses wh	nich protect from splashes				
Туре		Field of application		Characteristics	
Safety glasses		Droplet		clear	
Skin and body protection	on:				
Long sleeved protective clothing					
Personal protective equ	uipment symbol(s):				



#### Other information:

Do not eat, drink or smoke during use.



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#### 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 pН 6.2 Melting point No data available Freezing point No data available No data available Boiling point No data available Flash point No data available Relative evaporation rate (butylacetate=1) Flammability (solid, gas) Non flammable. Vapour pressure No data available Relative vapour density at 20°C No data available Relative density No data available 1.46 g/ml DIN EN ISO 1183-3 Density Solubility insoluble in water. Partition coefficient n-octanol/water (Log Pow) No data available No data available Auto-ignition temperature Decomposition temperature No data available No data available Viscosity, kinematic 36 - 53 Pa·s HN-0333 Viscosity, dynamic Explosive limits No data available Explosive properties Product is not explosive. Oxidising properties 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.

#### 10.5. 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.



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11.1. Information on toxicological effects	
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
2,2'-[(1-methylethylidene)bis(4,1-phenyler	ieoxymethylene)]bisoxirane (1675-54-3)
LD50 oral rat	> 2000 mg/kg (Rat; OECD 420: Acute Oral toxicity – Acute Toxic Class Method; Experimenta value)
LD50 oral	11400 mg/kg
LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
Reaction products of hexane-1,6-diol with	ı 2-(chloromethyl) (933999-84-9)
LD50 oral rat	3010 mg/kg
LD50 dermal rat	> 2000 mg/kg
Formaldehyde, oligomeric reaction produ	cts 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)
Skin corrosion/irritation	Causes severe skin burns. pH: 6.2
Serious eye damage/irritation	Assumed to cause serious eye damage pH: 6.2
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Suspected of causing genetic defects.
Carcinogenicity	Not classified
2,2'-[(1-methylethylidene)bis(4,1-phenyler	ieoxymethylene)]bisoxirane (1675-54-3)
IARC group	3 - Not classifiable
Quartz (SiO2) (14808-60-7)	
ARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
Reproductive toxicity	May damage fertility
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
/iscosity, kinematic	No data available
Potential adverse human health effects and symptoms	No additional information available.
Symptoms/effects after skin contact	Causes skin irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	Causes serious eye irritation.

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

#### 12.1. Toxicity

Ecology - water

Toxic to aquatic life with long lasting effects.



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2,2'-[(1-methylethylidene)bis(4,1-phenyle	neoxymethylene)]bisoxirane (1675-54-3)		
LC50 - Fish [1]	1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal)		
EC50 - Crustacea [1]	2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Nominal concentration)		
LC50 - Fish [2]	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)		
EC50 72h - Algae [1]	9.4 mg/l (EPA 660/3 - 75/009, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Biomass)		
Threshold limit - Algae [1]	> 11 mg/l (72 h; Scenedesmus sp.)		
Threshold limit - Algae [2]	4.2 mg/l (72 h; Scenedesmus sp.)		
Reaction products of hexane-1,6-diol wit	h 2-(chloromethyl) (933999-84-9)		
LC50 - Fish [1]	30 mg/l		
LC50 - Other aquatic organisms [1]	23.1 mg/l		
EC50 - Crustacea [1]	47 mg/l		
NOEC (acute)	18 mg/l		
12.2. Persistence and degradability			
HIT-RE 100, A			
Persistence and degradability	May cause long-term adverse effects in the environment.		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Not rapidly degradable			
Reaction products of hexane-1,6-diol wit	h 2-(chloromethyl) (933999-84-9)		
Not rapidly degradable			
Quartz (SiO2) (14808-60-7)			
Not rapidly degradable			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
1,3 Propanediol, 2 ethyl-2-(hydroxymethy	yl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)		
Not rapidly degradable			
Formaldehyde, oligomeric reaction prod	ucts with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)		
Not rapidly degradable			
12.3. Bioaccumulative potential			
HIT-RE 100, A			
Bioaccumulative potential	Not established.		



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2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Partition coefficient n-octanol/water (Log Pow)	≥ 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).		
Quartz (SiO2) (14808-60-7)			
Bioaccumulative potential	No bioaccumulation data available.		
12.4. Mobility in soil			
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)			
Surface tension	59 mN/m (20 °C, 0.09 g/l)		
Ecology - soil	No (test)data on mobility of the substance available.		
Quartz (SiO2) (14808-60-7)			
Surface tension	No data available in the literature		

#### 12.5. Other adverse effects

Other information

Ecology - soil

Avoid release to the environment.

Low potential for mobility in soil.

SECTION 13: Disposal considerations			
13.1. Disposal methods			
Regional legislation (waste)	Disposal must be done according to official regulations.		
Product/Packaging disposal recommendations	After curing, the product can be disposed of with household waste Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Packaging contaminated by the product : Dispose in a safe manner in accordance with local/national regulations.		
Ecology - waste materials	Avoid release to the environment.		

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

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

ADR	IMDG	IATA	RID			
14.1. UN number or ID number	14.1. UN number or ID number					
UN 1759	UN 1759	UN 1759	UN 1759			
14.2. UN proper shipping nam	14.2. UN proper shipping name					
CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)	Corrosive solid, n.o.s. (trimethylolpropane triglycidylether)	CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)			
Transport document description	Transport document description					
UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, (E), ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, MARINE POLLUTANT/ENVIRONMENTALL Y HAZARDOUS	UN 1759 Corrosive solid, n.o.s. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS	UN 1759 CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether), 8, III, ENVIRONMENTALLY HAZARDOUS			



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ADR	IMDG	ΙΑΤΑ	RID		
14.3. Transport hazard class(es)					
8	8	8	8		
B	B		B		
14.4. Packing group					
III	III	III	III		
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		

#### 14.6. Special precautions for user

Overland transport	
Classification code (ADR)	C10
Special provisions (ADR)	274
Limited quantities (ADR)	5kg
Packing instructions (ADR)	P002, IBC08, LP02, R001
Mixed packing provisions (ADR)	MP10
Transport category (ADR)	3
Orange plates	80 1759
Tunnel restriction code (ADR)	E
Transport by sea	
Special provisions (IMDG)	223, 274
Packing instructions (IMDG)	P002, LP02
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-B
Stowage category (IMDG)	A
Air transport	
PCA packing instructions (IATA)	860
PCA max net quantity (IATA)	25kg
CAO packing instructions (IATA)	864
Special provisions (IATA)	A3, A803
Rail transport	
Special provisions (RID)	274
Packing instructions (RID)	P002, IBC08, LP02, R001
14.7. Maritime transport in bulk according	to IMO instruments
Not applicable	

Not applicable



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## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 15.2. International regulations

#### Quartz (SiO2) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

#### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

#### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date 05/09/2023

Full text of H-statements	
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.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	



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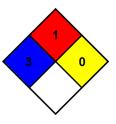
Abbreviation	is and acronyms	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	

#### NFPA health hazard

NFPA fire hazard NFPA reactivity

3 - Materials that, under emergency conditions, can cause serious or permanent injury.

1 - Materials that must be preheated before ignition can occur. 0 - Material that in themselves are normally stable, even under fire conditions.



#### SDS\_US\_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.