

# **HIT-RE 100**

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

Issue date: 23/09/2022

Revision date: 23/09/2022

Supersedes: 11/05/2020

Version: 3.1

#### **SECTION 1: Kit identification**

#### **1.1 Product identifier**

Product name



Product code

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

Hilti (South Africa) (Pty) Ltd. 2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road and R101 2090 Midrand - South Africa T +2711 237300 - F +2711 2373111 Customercare.za@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

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 United Nations GHS**

	•	
Acute Tox. 4 (Oral)		H302
Skin Corr. 1B		H314
Eye Dam. 1		H318
Skin Sens. 1		H317
Muta. 2		H341
Repr. 1B		H360
Aquatic Acute 2		H401
Aquatic Chronic 2		H411

#### Label elements

#### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN) Hazardous ingredients Hazard statements (GHS UN) Danger

Epoxy resin, Amines

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H341 - Suspected of causing genetic defects.



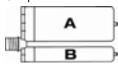
# **HIT-RE 100**

Safety information for 2-Component-products

	H360 - May damage fertility or the unborn child. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS UN)	<ul> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P262 - Do not get in eyes, on skin, or on clothing.</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>P302+P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> </ul>

#### 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 100, A		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Acute 2, H401 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 Acute 3, H402 Aquatic Chronic 3, H412

General advice	For professional users only
ECTION 5: Safe handling advi	ce
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
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



# **HIT-RE 100**

Safety information for 2-Component-products

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.
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





according to the United Nations GHS (Rev. 9, 2021) Issue date: 23/09/2022 Revision date: 23/09/2022

Supersedes: 11/05/2020

Version: 2.1

1.1. GHS Product identifier			
Product form Product name	Mixture HIT-RE 100, B		
UN-No. (ADR) Product code	3259 BU Anchor		
1.2. Other means of identification			
No additional information available			
1.3. Recommended use of the chemical and re	estrictions on u	se	
Use of the substance/mixture Recommended uses and restrictions	Composite morta For professional u	r component for fasteners in th use only	e construction industry
1.4. Supplier's details			
Supplier Hilti (South Africa) (Pty) Ltd. 2 Tugela Lane, Waterfall Logistics Precinct Corner Brid R101 ZA– 2090 Midrand South Africa T +2711 237300 - F +2711 2373111 Customercare.za@hilti.com	lal Veil Road and	Department issuing data s Hilti Entwicklungsgesellscha Hiltistraße 6 DE– 86916 Kaufering Deutschland T +49 8191 906876 anchor.hse@hilti.com	•
1.5. Emergency phone number			
Emergency number	Schweizerisches +41 44 251 51 51 +2711 237300	Toxikologisches Informationsz I (international)	entrum – 24h Service
SECTION 2: Hazard identification			
2.1. Classification of the substance or mixture	9		
	3		
Classification according to the United Nations GHS	1	1302	Calculation method
•	Г		
Acute toxicity (oral), Category 4		1314	Expert judgment
Classification according to the United Nations GHS Acute toxicity (oral), Category 4 Skin corrosion/irritation, Category 1B Skin sensitisation, Category 1	Н	1314 1317	Expert judgment Calculation method
Acute toxicity (oral), Category 4 Skin corrosion/irritation, Category 1B	H		

#### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)

Signal word (GHS UN) Hazardous ingredients

Hazard statements (GHS UN)

Danger Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene, resorcinol, m-Xylylenediamine H302 - Harmful if swallowed H314 - Causes severe skin burns and eye damage



according to the United Nations GHS (Rev. 9, 2021)

	H317 - May cause an allergic skin reaction
	H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS UN)	P262 - Do not get in eyes, on skin, or on clothing.
	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 which do not result in classification

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	<ul> <li>Acute toxicity (oral), Category 4, H302</li> <li>Acute toxicity</li> <li>(inhalation:dust,mist) Category 4, H332</li> <li>Skin corrosion/irritation, Category 1B, H314</li> <li>Serious eye damage/eye irritation, Category 1, H318</li> <li>Skin sensitisation, category 1B, H317</li> <li>Hazardous to the aquatic environment – Acute Hazard, Category 3, H402</li> <li>Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412</li> </ul>
Formaldehyde, telomer with 1,3- benzenedimethanamine, 1,3-benzenediol and ethenylbenzene	CAS-No.: 710292-85-6	10 - 25	Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment – Acute Hazard, Category 2, H401 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411



according to the United Nations GHS (Rev. 9, 2021)

Name	Product identifier	%	Classification according to the United Nations GHS
resorcinol	CAS-No.: 108-46-3	0,1 - 1	Acute toxicity (oral), Category 4, H302 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Specific target organ toxicity – single exposure, Category 1, H370 Specific target organ toxicity – Single exposure, Category 2, H371 Hazardous to the aquatic environment – Acute Hazard, Category 1, H400 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412

Full text of H-statements: see section 16

SECTION 4: First-aid measures		
4.1. Description of necessary first-aid mea	asures	
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	Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.	
4.2. Most important symptoms/effects, acute and delayed		
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.	
Potential adverse human health effects and	No additional information available.	

# 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

symptoms

SECTION 5: Fire-fighting measures		
5.1. Suitable 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 chemical		
Hazardous decomposition products in case of fire	Thermal decomposition generates : Carbon dioxide. Carbon monoxide.	



# HIT-RE 100, B

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according to the United Nations GHS (Rev. 9, 2021)

5.3. Special protective actions for fire-fighte	rs
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 Protective equipment Protective equipment Use personal protective equipment as required. Equip cleanup crew with proper protection. Emergency procedures Ventilate area. 6.2. Environmental precautions Evacuate unacessary personnel

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 materials 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		
Precautions for safe handling Hygiene measures	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. 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, in	cluding 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.	
Heat and ignition sources	Keep away from heat and direct sunlight.	

5 – 25 °C

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

#### 8.1. Control parameters

Storage temperature

No additional information available

#### 8.2. Appropriate engineering controls

Environmental exposure controls Consumer exposure controls Avoid release to the environment. Avoid contact during pregnancy/while nursing.



according to the United Nations GHS (Rev. 9, 2021)

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 either mixtures of substances or different substances may shorten the protective function's effective duration.

Туре	Material	Permeation	Thickn	ess (mm)	Penetration		Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	> 0,4				EN ISO 374
Eye protection         Wear security glasses which protect from splashes							
Туре		Field of application Characteristic		s	Standa	ard	
Safety glasses		Droplet cl		clear		EN 166	6, EN 170

Personal protective equipment symbol(s)



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

No additional information available

#### SECTION 9: Physical and chemical properties

#### 9.1. Basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste
Colour	Red-brown to black.
Odour	Amine-like.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Non flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
рН	11,5
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1,41 g/cm³ DIN EN ISO 1183-3
Relative density	Not available
Relative vapour density at 20 °C	Not applicable
Solubility	insoluble in water.
Viscosity, dynamic	43 – 57 Pa∙s HN-0333
Particle size	Not available

#### 9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available



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according to the United Nations GHS (Rev. 9, 2021)

#### **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.

cute toxicity (oral)	
	Harmful if swallowed.
cute toxicity (dermal)	Not classified
cute toxicity (inhalation)	Not classified
HIT-RE 100, B	
ATE UN (oral)	1706,776 mg/kg bodyweight
Formaldehyde, telomer with 1,3-benzene	edimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)
_D50 oral rat	> 2000 mg/kg
_D50 dermal rat	> 2000 mg/kg
resorcinol (108-46-3)	
_D50 oral	301 mg/kg
m-Xylylenediamine (1477-55-0)	
_D50 oral rat	1090 mg/kg
_D50 dermal rat	> 3100 mg/kg
_D50 dermal	> 3100 mg/kg
_C50 Inhalation - Rat (Dust/Mist)	1,34 mg/l/4h
kin corrosion/irritation	Causes severe skin burns.
	pH: 11,5
erious eye damage/irritation	Assumed to cause serious eye damage
espiratory or skin sensitisation	pH: 11,5 May cause an allergic skin reaction.
erm cell mutagenicity	Not classified
carcinogenicity	Not classified
eproductive toxicity	Not classified
TOT-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).



according to the United Nations GHS (Rev. 9, 2021)

STOT-repeated exposure Aspiration hazard Potential adverse human health effects and symptoms Not classified Not classified No additional information available.

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

1	2.1	I. T	oxi	icity	

Ecology - water	Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term	Harmful to aquatic life.
(acute)	
Classification procedure (Hazardous to the aquatic	Expert judgment
environment, short–term (acute))	
Hazardous to the aquatic environment, long-term	Harmful to aquatic life with long lasting effects.
(chronic)	
Classification procedure (Hazardous to the aquatic	Expert judgment
environment, long–term (chronic))	

Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6)		
≥ 50 mg/l		
≥ 31,8 mg/l		
2,4 mg/l		
6,25 mg/l		
resorcinol (108-46-3)		
1,28 mg/l		
m-Xylylenediamine (1477-55-0)		
75 mg/l		
20,3 ppb		
15 mg/l		
15 mg/l		
10,5 mg/kg		
4,7 mg/l		
4,7 mg/l		
12.2. Persistence and degradability		
HIT-RE 100, B		
May cause long-term adverse effects in the environment.		

#### m-Xylylenediamine (1477-55-0)

Not rapidly degradable

#### 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 Kow)	5,14



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12.4. Mobility in soil		
HIT-RE 100, B		
Mobility in soil	No additional information available	
12.5. Other adverse effects		
Ozone	Not classified	
Other adverse effects	No additional information available	
Other information	Avoid release to the environment	

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**

ADR	IMDG	ΙΑΤΑ	RID
4.1. UN number			
UN 3259	UN 3259	UN 3259	UN 3259
4.2. UN proper shipping name	9		
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)
ransport 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
4.3. Transport hazard class(e	s)		
8	8	8	8
B	B	8	B
4.4. Packing group			
II	II	II	II
4.5. 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



according to the United Nations GHS (Rev. 9, 2021)

14.6. Special precautions for user	
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 3259
Tunnel restriction code (ADR)	E
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
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
14.7 Transport in bulk according to Anney	x II of Marnol and the IBC Code

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

Not applicable

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

#### 15.1. Safety, health and environmental regulations specific for the product in question

No additional information available

# SECTION 16: Other informationSDS Major/MinorNoneIssue date23/09/2022Revision date23/09/2022Supersedes11/05/2020

Section	Changed item	Change	Comments
	Legislation	Modified	

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways



according to the United Nations GHS (Rev. 9, 2021)

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 IATA - 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 None.

Other information

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	
H370	Causes damage to organs	
H371	May cause damage to organs	
H400	Very toxic to aquatic life	
H401	Toxic to aquatic life	
H402	Harmful to aquatic life	
H411	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.





according to the United Nations GHS (Rev. 9, 2021) Issue date: 23/09/2022 Revision date: 23/09/2022

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Version: 3.1

1.1. GHS Product identifier	
Product formMixtureProduct nameHIT-RE 100UN-No. (ADR)1759Product codeBU Anchor	
1.2. Other means of identification	
No additional information available	
1.3. Recommended use of the chemical and restrictions	ns on use
Use of the substance/mixtureComposite mortar component for fasteners in the construction industryRecommended uses and restrictionsFor professional use only	
1.4. Supplier's details	
Supplier Hilti (South Africa) (Pty) Ltd. 2 Tugela Lane, Waterfall Logistics Precinct Corner Bridal Veil Road R101 ZA– 2090 Midrand South Africa T +2711 237300 - F +2711 2373111 Customercare.za@hilti.com	Department issuing data specification sheet Hilti Entwicklungsgesellschaft mbH ad and Hiltistraße 6 DE– 86916 Kaufering Deutschland T +49 8191 906876 anchor.hse@hilti.com
1.5. Emergency phone number	
	erisches Toxikologisches Informationszentrum – 24h Service /51 51 51 (international) 37300
SECTION 2 <sup>.</sup> Hazard identification	
2.1. Classification of the substance or mixture	
2.1. Classification of the substance or mixture Classification according to the United Nations GHS Skin corrosion/irritation, Category 1C Skin sensitisation, Category 1	H314 Calculation method H317 Calculation method
SECTION 2: Hazard identification 2.1. Classification of the substance or mixture Classification according to the United Nations GHS Skin corrosion/irritation, Category 1C Skin sensitisation, Category 1 Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Hazardous to the aquatic environment – Acute Hazard, Category 2	H317Calculation methodH341Calculation methodH360Calculation method

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

#### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)





according to the United Nations GHS (Rev. 9, 2021)

Hazardous ingredients	2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane, Reaction products of
	hexane-1,6-diol with 2-(chloromethyl), 1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer
	with 2-(chloromethyl)oxirane, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-
	epoxypropane and phenol
Hazard statements (GHS UN)	H314 - Causes severe skin burns and eye damage
	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 UN)	P262 - Do not get in eyes, on skin, or on clothing.
	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 which do not result in classification

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
2,2'-[(1-methylethylidene)bis(4,1- phenyleneoxymethylene)]bisoxirane	CAS-No.: 1675-54-3	25 - 40	Flammable liquids Not classified Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 2, H401 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and phenol	CAS-No.: 9003-36-5	10 – 25	Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411



according to the United Nations GHS (Rev. 9, 2021)

Name	Product identifier	%	Classification according to the United Nations GHS
Reaction products of hexane-1,6-diol with 2- (chloromethyl)	CAS-No.: 933999-84-9	10 - 25	Flammable liquids Not classified Acute toxicity (oral), Category 5, H303 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 Hazardous to the aquatic environment – Acute Hazard, Category 3, H402 Hazardous to the aquatic environment – Chronic Hazard, Category 3, H412
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane	CAS-No.: 30499-70-8	5 – 10	Skin corrosion/irritation, Category 1C, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Germ cell mutagenicity, Category 2, H341 Reproductive toxicity, Category 1B, H360 Hazardous to the aquatic environment – Chronic Hazard, Category 2, H411

Full text of H-statements: see section 16

#### SECTION 4: First-aid measures

4.1. Description of necessary 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. 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/effects, acute and delayed			
Symptoms/effects after skin contact Symptoms/effects after eye contact Potential adverse human health effects and symptoms	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. No additional information available.		

#### 4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.



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SECTION 5: Fire-fighting measures		
5.1. Suitable 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 actions for fire-fighter	S	
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.	

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 processions		

#### 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 materials 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 sto	orage
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, inc	cluding any incompatibilities
Storage conditions	Protect from sunlight.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Heat and ignition sources	Keep away from heat and direct sunlight.

. 5 – 25 °C

Storage temperature



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#### SECTION 8: Exposure controls/personal protection 8.1. Control parameters No additional information available 8.2. Appropriate engineering controls 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 either mixtures of substances or different substances may shorten the protective function's effective duration. Туре Material Permeation Thickness (mm) Penetration Standard EN ISO 374 Disposable gloves Nitrile rubber (NBR) 6 (> 480 minutes) > 0,4 Eye protection Wear security glasses which protect from splashes

Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166, EN 170

Personal protective equipment symbol(s)



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

No additional information available

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

#### 9.1. Basic physical and chemical properties

Physical state	Solid
Appearance	Thixotropic paste
Colour	Light grey.
Odour	characteristic.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Non flammable.
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
рН	6,2
pH solution	Not available
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	1,46 g/ml DIN EN ISO 1183-3
Relative density	Not available
Relative vapour density at 20 °C	Not applicable



according to the United Nations GHS (Rev. 9, 2021)

Solubility	insoluble in water.
Viscosity, dynamic	36 – 53 Pa·s HN-0333
Particle size	Not available

#### 9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive properties

Product is not explosive

#### **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.

11.1. Information on toxicological ef	fects
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
2,2'-[(1-methylethylidene)bis(4,1-ph	enyleneoxymethylene)]bisoxirane (1675-54-3)
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)
Reaction products of hexane-1,6-di	ol with 2-(chloromethyl) (933999-84-9)
LD50 oral rat	3010 mg/kg
LD50 dermal rat	> 2000 mg/kg
Formaldehyde, oligomeric reaction	products 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
Reproductive toxicity	May damage fertility.
STOT-single exposure	Not classified



according to the United Nations GHS (Rev. 9, 2021)

STOT-repeated exposure Aspiration hazard Potential adverse human health effects and symptoms Not classified Not classified No additional information available.

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

#### 12.1. Toxicity

Ecology - water	Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term	Toxic to aquatic life.
(acute)	
Classification procedure (Hazardous to the aquatic	Calculation method
environment, short–term (acute))	
Hazardous to the aquatic environment, long-term	Toxic to aquatic life with long lasting effects.
(chronic)	
Classification procedure (Hazardous to the aquatic	Calculation method
environment, long–term (chronic))	

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)		
LC50 - Fish [1]	1,2 mg/l (96 h; Oncorhynchus mykiss; Lethal)	
LC50 - Fish [2]	2,3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)	
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)	
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 with 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	

#### 12.2. Persistence and degradability

NOEC (acute)

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 with 2-(chloromethyl) (933999-84-9)			
Not rapidly degradable			
1,3 Propanediol, 2 ethyl-2-(hydroxymethyl)-, polymer with 2-(chloromethyl)oxirane (30499-70-8)			
Not rapidly degradable			
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)			
Not rapidly degradable			

23/09/2022

18 mg/l



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12.3. Bioaccumulative potential			
HIT-RE 100, A			
Bioaccumulative potential	Not established.		
2,2'-[(1-methylethylidene)bis(4,1-phenyleneo	xymethylene)]bisoxirane (1675-54-3)		
Partition coefficient n-octanol/water (Log Kow)	≥ 2,918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)		
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).		
12.4. Mobility in soil			
HIT-RE 100, A			
Mobility in soil	No additional information available		
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.		
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. Disposal methods

Totti Diopodul motilodo	
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	ΙΑΤΑ	RID			
14.1. UN number	l4.1. UN 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						
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			
14.3. Transport hazard class(es)						
8	8	8	8			



according to the United Nations GHS (Rev. 9, 2021)

Image: state of the environment: Yes	III Dangerous for the environment:				
III         14.5. Environmental hazards         Dangerous for the environment:		111			
14.5. Environmental hazards           Dangerous for the environment:			111		
Dangerous for the environment:	Dangerous for the environment		111		
	Dangerous for the environment				
	Yes Marine pollutant: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes		
No supplementary information availab	ble				
14.6. Special precautions for us	er				
Overland transport Classification code (ADR) Special provisions (ADR) Limited quantities (ADR) Packing instructions (ADR) Mixed packing provisions (ADR) Transport category (ADR) Orange plates	C10 274 5kg P002, IBC08, LP02, R001 MP10 3 <b>80</b> <b>1759</b> E				
Transport by sea Special provisions (IMDG) Packing instructions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG)	223, 274 P002, LP02 F-A S-B A				
<b>Air transport</b> PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) Special provisions (IATA)	860 25kg 864 A3, A803				
<ul> <li>Rail transport</li> <li>Special provisions (RID)</li> <li>Packing instructions (RID)</li> <li>14.7. Transport in bulk accordin</li> </ul>	274 P002, IBC08, LP0 ng to Annex II of Marpol and th				

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

15.1. Safety, health and environmental regulations specific for the product in question

No additional information available



according to the United Nations GHS (Rev. 9, 2021)

SDS Major/Minor Issue date Revision date Supersedes		None 23/09/2022 23/09/2022 11/05/2020		
Section	Changed item		Change	Comments
	Legislation		Modified	
Abbreviations and	acronyms	Inland Waterways ADR - European Ag Road ATE - Acute Toxicit BCF - Bioconcentra CLP - Classification DMEL - Derived Min DNEL - Derived Min DNEL - Derived-No EC50 - Median effe IARC - International IMDG - International IMDG - International LC50 - Median letha LD50 - Median letha LD50 - Median letha LD50 - Median letha LOAEL - Lowest Ot NOAEC - No-Observ NOEC - No-Observ OECD - Organisatio PBT - Persistent Bio PNEC - Predicted N REACH - Registrati (EC) No 1907/2006 RID - Regulations of SDS - Safety Data	greement concerning the y Estimate tion factor Labelling Packaging Re- nimal Effect level Effect Level ctive concentration Agency for Research or Air Transport Association Maritime Dangerous Ge al concentration al dose Deserved Adverse Effect Leve ed Adverse Effect Concentration on for Economic Co-oper baccumulative Toxic lo-Effect Concentration on, Evaluation, Authorisa	oods evel centration I ation and Development ation and Restriction of Chemicals Regulation nal Carriage of Dangerous Goods by Rail

Full text of H-statements:				
H303	May be harmful if swallowed	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			
H341	Suspected of causing genetic defects			
H360	May damage fertility or the unborn child			
H401	Toxic to aquatic life			
H402	Harmful to aquatic life			
H411	Toxic to aquatic life with long lasting effects			
23/09/2022	EN (English)	23/24		



according to the United Nations GHS (Rev. 9, 2021)

Full text of H-statements:		
H412	Harmful to aquatic life with long lasting effects	

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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.