

依据标准: GB/T 16483, GB/T 17519-2013

Version:9.2

Revision date:2018/08/09 Date of issue:2018/08/09 Supersedes:2017/08/11

SECTION 1 Chemical product and company identification

Product identifier

Product name
Product code

HIT-RE 500 BU Anchor



Details of the supplier of the safety data sheet

Hilti (China) LTS.
Greenland Center No. 600 Middle Longhua Road, 22/F Block B
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800-820-2585 (Toll Free) - F +86 21 6485 0311
cncs@hilti.com

Supplier

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Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum -

24h Service

+41 44 251 51 51 (international)

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800-820-2585 (Toll Free)

Country	Organisation/Company	Address	Emergency number
China	chemical accident emergency consultation service hotline (24/7)		4 0 0 - 6 2 6 7 - 9 1 1

SECTION 2: Hazards identification

Emergency overview

Thixotropic paste. red. Grey. Amine-like. Corrosive vapours. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Use personal protective equipment as required. Equip cleanup crew with proper protection

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Safety Data Sheet

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

GHS classification

Health hazards Skin corrosion/irritation, Category 1B

Serious eye damage/eye irritation, Category 1

Skin sensitisation, Category 1

Reproductive toxicity, Category 1B

Environmental hazards Hazardous to the aquatic environment — Acute

Hazard, Category 2

Hazardous to the aquatic environment — Chronic

Hazard, Category 2

Other hazards not mentioned above are Not applicable or No data is available.

GHS-CN labelling

Hazard pictograms (GHS-CN)









Signal word (GHS-CN)

(GHS-CN)

Hazard statements (GHS-CN)

GHS05 Danger

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H360 - May damage fertility..

H411 - Toxic to aquatic life with long lasting effects.

P262 - Do not get in eyes, on skin, or on clothing, P280 - Wear eye protection, protective clothing, protective gloves, P302+P352 - IF ON SKIN: Wash with plenty of water, P333+P313 - If skin irritation or rash occurs: Get medical advice/attention, P337+P313 - If eye irritation persists: Get medical advice/attention, P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, P410+P403 - Protect from sunlight. Store in a well-ventilated place, P501 - Dispose of

contents/container to hazardous or special waste collection point, in accordance with local, regional,

national and/or international regulation

Precautionary statements

Additional information

SECTION 3: Composition/information on ingredients

Product form

Mixture

Component A: Epoxy resin, Reactive diluent, inorganic filler

Component B: Amine hardener, inorganic filler

A		
Name	CAS-No.	Concentration (%)
2,2'-[(1-	1675-54-3	10 - 25
methylethylidene)bis(4,1-		

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phenyleneoxymethylene)]biso xirane		
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9 0 0 3 - 3 6 - 5	5 - 10
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	9 3 3 9 9 9 - 8 4 - 9	5 - 10
1,3 Propanediol, 2 ethyl-2- (hydroxymethyl)-, polymer with 2- (chloromethyl)oxirane	3 0 4 9 9 - 7 0 - 8	2.5 - 5
В		
Name	CAS-No.	Concentration (%)
m-Xylylenediamine	1 4 7 7 - 5 5 - 0	5 - 10

SECTION 4: First aid measures

3	m	е	r	g	е	n	С	y	
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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 e contact	ye Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	Drink plenty of water. Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

Most Important Symptoms/Effects

Symptoms/effects

Causes severe skin burns and eye damage.

Symptoms/effects after
inhalation

Symptoms/effects after eye

Causes serious eye damage.

Personal Protection in First Aid and Measures

Notes for the doctor

contact

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

SECTION 5 Fire fighting measures

Extinguishing media

Suitable extinguishing media Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing Do not use a heavy water stream.

media

Special hazard

Hazardous decomposition Thermal decomposition generates :

products in case of fire Carbon dioxide

Advice for firefighters and protective 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 Self-contained breathing apparatus

firefighting Do not enter fire area without proper protective

equipment, including respiratory protection

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures Spilled material may present a slipping hazard

For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

For emergency responders

Protective equipment Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

Environmental precautions

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.

Methods and Equipment for Containment and Cleaning up

For containment Collect spillage.

Prevention Measures for Secondary Accidents

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Safety Data Sheet

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

SECTION 7 Handling and storage

Handling

Precautions for safe Wear personal protective equipment handling 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 Wash hands, forearms and face thoroughly after handling.

Contaminated work clothing should not be allowed out of

the workplace.

Wash contaminated clothing before reuse.

Storage

Storage conditions Protect from sunlight. Store in a well-ventilated place.

Technical measures Comply with applicable regulations

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls / Personal protection equipment

Occupational Exposure Limits

No additional information available

Biological limit values

No additional information available

Monitoring methods

Personal protective equipment

Personal protective Avoid all unnecessary exposure

equipment

Environmental exposure Avoid release to the environment.

 $c\,o\,n\,t\,r\,o\,l\,s$

Consumer exposure controls Avoid contact during pregnancy/while nursing.

Other information Do not eat, drink or smoke during use

Hand protection Wear protective gloves.

Туре	Material	Permeation	Thickness (mm)	Penetratio n	Standard
Disposable gloves.	Nitrile rubber (NBR).	6 (> 480 minutes).	> 0,4		EN 374.

Eye protection Chemical goggles or safety glasses

Туре	Use	Characteristics	Standard
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Safety Data Sheet

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

Safety glasses. Droplet. clear. EN 166, EN 170.

Skin and body protection Wear suitable protective clothing

Respiratory protection Wear appropriate mask



SECTION 9 Physical and chemical properties

Solid Physical state Appearance Thixotropic paste Colour component A: grey, component B: Red 0 d o u r Amine-like Odour threshold (ppm) No data available $0 \, dour \, threshold \, (mg/m^3)$ No data available 11.5 (Component B) Η α No data available pH solution Relative evaporation rate No data available (butylacetate=1)Relative evaporation rate No data available (ether=1)Evaporation rate No data available Other properties No data available Melting point No data available Freezing point No data available Boiling point No data available Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) Non flammable. Critical temperature No data available Vapour pressure No data available Vapour pressure at 50 $^{\circ}$ C No data available Critical pressure No data available No data available Relative vapour density at 20 ° C Relative density No data available Relative density of No data available saturated gas/air mixture B: 1,41 g/cm^3) Density 1.45 g/cm^3 (A: 1,46 g/cm^3 No data available Relative gas density No data available Solubility Solubility in water No data available Solubility in ethanol No data available Solubility in ether No data available

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Safety Data Sheet

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

Solubility in acetone No data available Solubility in organic No data available solvents Log Pow No data available Log Kow No data available Explosive limits (g/m^3) No data available Explosive limits (vol %) No data available Lower explosive limit (LEL) No data available Upper explosive limit (UEL) No data available Radioactive Νo

SECTION 10: Stability and reactivity

Chemical stability Not established Possibility of hazardous Not established

reactions

Conditions to avoid Direct sunlight. Extremely high or low temperatures

Incompatible materials Strong acids
Strong bases

Hazardous decomposition fume

products Carbon monoxide Carbon dioxide

SECTION 11: Toxicological information

Acute toxicity

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

No data available

LD50 oral rat	5000 mg/kg bodyweight (Rat; ECHA)
LD50 dermal rat	2000 mg/kg bodyweight (Rat; ECHA)

Reaction products of hexane-1,6-diol with 2-(chloromethyl)		
LD50 oral rat	3010 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
ATE CN (oral)	3010 mg/kg bodyweight	

2, 2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
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)

m-Xylylenediamine	
LD50 oral rat	1090 mg/kg
LD50 oral	660 mg/kg
LD50 dermal rat	> 3100 mg/kg

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LD50 dermal	2000 mg/kg
LC50 inhalation rat (Dust/Mist - mg/1/4h)	1.34 mg/1/4h
ATE CN (oral)	660 mg/kg bodyweight
ATE CN (dermal)	2000 mg/kg bodyweight
ATE CN (dust, mist)	1.34 mg/1/4h

Skin corrosion/irritation

 ${\tt Skin \ corrosion/irritation}$

рН

Causes severe skin burns and eye damage.

11.5 (Component B)

Serious eye damage/irritation

Serious eye

Causes serious eye damage.

damage/irritation

Respiratory or skin sensitisation

Respiratory or skin

sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Germ cell mutagenicity

No data available

Carcinogenicity

Carcinogenicity

No data available

Reproductive toxicity

Reproductive toxicity

May damage fertility..

STOT-single exposure

STOT-single exposure

No data available

STOT-repeated exposure

STOT-repeated exposure

No data available

Aspiration hazard

Aspiration hazard

No data available

HIT-RE 500	
Human evidence for classification	N o
Not able to form a pool	No

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Hydrocarbon	N o
Aliphatic, alicyclic or aromatic hydrocarbon	N o
Polycyclic-aromatic hydrocarbons	N o
Density	1.45 g/cm ³ (A: 1,46 g/cm ³ B: 1,41 g/cm ³)

SECTION 12: Ecological information

Toxicity

Ecology - water Very toxic to aquatic life.

Acute aquatic toxicity Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

Reaction products of hexane-1,	6-diol with 2-(chloromethyl)
LC50 fish 1	30 mg/1
EC50 Daphnia 1	47 mg/l

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	
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 Daphnia 1	1.7 mg/l
ErC50 (algae)	> 11 mg/l (EPA 660/3 - 75/009, 72 h, Scenedesmus sp., Static system, Fresh water, Experimental value)
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)

m-Xylylenediamine	
LC50 fish 1	75 mg/l
EC50 Daphnia 1	15 mg/l
NOEC chronic crustacea	4.7 mg/l

Persistence and degradability

HIT-RE 500	
Not rapidly degradable	N o
Persistence and degradability	Not established

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	
Not rapidly degradable	No
Reaction products of hexane-1,6-diol with 2-(chloromethyl)	
Not rapidly degradable	N o
1,3 Propanediol, 2 ethyl-2-(hy	droxymethyl)-, polymer with 2-(chloromethyl)oxirane
1,3 Propanediol, 2 ethyl-2-(hy Not rapidly degradable	droxymethyl)-, polymer with 2-(chloromethyl)oxirane
Not rapidly degradable	

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m-Xylylenediamine	
Not rapidly degradable	Yes

Bioaccumulative potential

HIT-RE 500	
Bioaccumulative potential	Not established

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500)
BCF other aquatic organisms 1	See section 12.1 on ecotoxicology
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 $^{\circ}$ C)
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)

Mobility in soil

HIT-RE 500	
Ecology - soil	Not established

2, 2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	
Ecology - soil	Low bioaccumulation potential (BCF < 500)
Surface tension	58.7 - 58.9 mN/m (20 °C, EU Method A.5: Surface tension)
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)

Other adverse effects

Classification procedure

(0zone)

Other information

No data available

Avoid release to the environment.

Results of PBT and vPvB assessment

SECTION 13: Disposal considerations

Product/Packaging disposal Dispose in a safe manner in accordance with

recommendations local/national regulations

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

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

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Safety Data Sheet

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

ADR	IMDG	IATA	RID				
14.1. UN number							
3259	3259	3259	3259				
14.2. UN proper shippi	ng name						
AMINES, SOLID,	AMINES, SOLID,	Amines, solid,	AMINES, SOLID,				
CORROSIVE, N.O.S. (m-	CORROSIVE, N.O.S. (m-	corrosive, n.o.s. (m-	CORROSIVE, N.O.S. (m-				
Xylylenediamine)	Xylylenediamine)	Xylylenediamine)	Xylylenediamine)				
Transport document desc	cription						
UN 3259 AMINES, SOLID,	UN 3259 AMINES, SOLID,	UN 3259 Amines, solid,	UN 3259 AMINES, SOLID,				
CORROSIVE, N.O.S. (m-	CORROSIVE, N.O.S. (m-	corrosive, n.o.s. (m-	CORROSIVE, N.O.S. (m-				
Xylylenediamine), 8, II,	Xylylenediamine), 8, II	Xylylenediamine), 8, II	Xylylenediamine), 8, II				
(E)							
14.3. Transport hazard	class(es)						
8	8	8	8				
8	*	*	8				
14.4. Packing group							
II	II	II	II				
14.5. Environmental ha	zards						
	I D C1	Dangerous for the	Dangerous for the				
Dangerous for the	Dangerous for the						
9	environment : No	environment : No	environment : No				
Dangerous for the environment : No			environment : No				

Special precautions for user

- Overland transport

Classification code (ADR)	C 8
Special provisions (ADR)	274
Limited quantities (ADR)	1 k g
Packing instructions (ADR)	P002, IBC08
Mixed packing provisions (ADR)	MP10
Orange plates	80 3259
Tunnel restriction code (ADR)	Е

- Transport by sea

Special	provisions	(IMDG)	274
Limited	quantities	(IMDG)	1 kg

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

Packing instructions (IMDG)	P 0 0 2	
EmS-No. (Fire)	F - A	
EmS-No. (Spillage)	S - B	
Stowage category (IMDG)	A	
M F A G - N o	154	
- Air transport		
PCA packing instructions (IATA)	8 5 9	
PCA max net quantity (IATA)	15 k g	
CAO packing instructions (IATA)	863	
Special provisions (IATA)	A 3	
- Rail transport		
Special provisions (RID)	274	
Limited quantities (RID)	1 k g	
Packing instructions (RID)	P002, I	B C 0 8
Carriage prohibited (RID)	N o	

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

SECTION 15: Regulatory information

SECTION 16 Other information

Compiled according to GB/T 16483, GB/T 17519

Indication of changes

Section	Changed item	Change	Comments
3.	Composition/informati	Modified.	
	on on ingredients.		

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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

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