

HIT-RE 500 V3

Safety information for 2-Component-products

Date of issue: 25/02/2019

Revision date: 25/02/2019

Supersedes: 20/08/2018

Version: 2.2

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-RE 500 V3



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

SECTION 3: Kit contents

Classification of the Product

GHS-US classification

Skin Corr. 1A	H314 - Causes severe skin burns and eye damage.
Skin Sens. 1	H317 - May cause an allergic skin reaction.
Muta. 2	H341 - Suspected of causing genetic defects (oral).
Repr. 1B	H360 - May damage fertility. (oral).
STOT SE 3	H335 - May cause respiratory irritation.

Label elements

GHS US labelling

Hazard pictograms (GHS US)



GHS05



GHS07



GHS08

Signal word (GHS US)

Danger

Hazardous ingredients

Epoxy resin, Amines

Hazard statements (GHS US)

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.
Suspected of causing genetic defects (oral).
May damage fertility. (oral).

Precautionary statements (GHS US)

Wear eye protection, protective clothing, protective gloves.
Do not get in eyes, on skin, or on clothing.

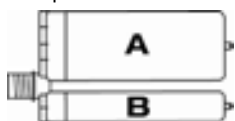
HIT-RE 500 V3

Safety information for 2-Component-products

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 500 V3, B		1	pcs (pieces)	Skin Corr. 1A, H314 Skin Sens. 1, H317 STOT SE 3, H335
HIT-RE 500 V3, A		1	pcs (pieces)	Skin Corr. 1C, H314 Skin Sens. 1, H317 Muta. 2, H341 Repr. 1B, H360

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
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.

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Safety information for 2-Component-products

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

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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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 02/25/2019

Revision date: 02/25/2019

Supersedes: 08/20/2018

Version: 1.3

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Product name	HIT-RE 500 V3, B
Product code	BU Anchor

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry
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1.3. Details of the supplier of the safety data sheet

Supplier

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

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.hse@hilti.com

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
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1A H314 - Causes severe skin burns and eye damage.
Skin Sens. 1 H317 - May cause an allergic skin reaction.
STOT SE 3 H335 - May cause respiratory irritation.

Full text of H statements : see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



GHS05

GHS07

Signal word (GHS US)

Danger

Hazard statements (GHS US)

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H335 - May cause respiratory irritation.

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.

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P302+P352 - If on skin: Wash with plenty of water

2.3. Other hazards

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
2-methyl-1,5-pentanediamine	(CAS-No.) 15520-10-2	25 - 35	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
Quartz (SiO ₂)	(CAS-No.) 14808-60-7	10 - 25	Carc. 1A, H350
Phenol, styrenated	(CAS-No.) 61788-44-1	5 - 10	Skin Irrit. 2, H315 Skin Sens. 1, H317
m-Xylylenediamine	(CAS-No.) 1477-55-0	5 - <8	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Skin Sens. 1, H317
2,4,6-tris(dimethylaminomethyl)phenol	(CAS-No.) 90-72-2	1 - 2,5	Skin Corr. 1B, H314 Eye Dam. 1, H318
3-Aminopropyltriethoxysilan	(CAS-No.) 919-30-2	1 - 2,5	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact

Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.

First-aid measures after eye contact

Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.

First-aid measures after ingestion

Drink plenty of water. Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms

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

Symptoms/effects

Causes severe skin burns and eye damage.

Symptoms/effects after inhalation

May cause an allergic skin reaction.

Symptoms/effects after eye contact

Causes serious eye damage.

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4.3. Immediate medical attention and special treatment, if necessary

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

Reactivity	Corrosive vapours.
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5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard.
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6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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 storage

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.
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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

2-methyl-1,5-pentanediamine (15520-10-2)		
Not applicable		
Phenol, styrenated (61788-44-1)		
Not applicable		
m-Xylylenediamine (1477-55-0)		
ACGIH	ACGIH Ceiling (mg/m ³)	0.1 mg/m ³
ACGIH	Remark (ACGIH)	Eye, skin, & GI irr
3-Aminopropyltriethoxysilan (919-30-2)		
Not applicable		
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)		
Not applicable		
Quartz (SiO₂) (14808-60-7)		
OSHA	Remark (OSHA)	(3) See Table Z-3.

Additional information

The product has a pasty consistency. Exposure limit values for respirable dusts are not relevant for this product.

8.2. Exposure controls

Personal protective equipment

Safety glasses. Gloves. Protective clothing. Avoid all unnecessary exposure.



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.

Eye protection

Wear security glasses which protect from splashes.

Skin and body protection

Wear suitable protective clothing.

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.

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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	red
Odour	Amine-like
Odour threshold	No data available
pH	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)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	1.31 g/cm ³
Solubility	insoluble in water.
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	50 - 70 Pa·s HN-0333

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

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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 Not classified

2-methyl-1,5-pentanediamine (15520-10-2)	
LD50 oral rat	1690 mg/kg (Rat)
LD50 dermal rat	1870 mg/kg
LC50 inhalation rat (mg/l)	4.9 mg/l
ATE US (oral)	1690 mg/kg bodyweight
ATE US (dermal)	1870 mg/kg bodyweight
ATE US (vapours)	4.9 mg/l/4h
ATE US (dust,mist)	4.9 mg/l/4h

Phenol, styrenated (61788-44-1)	
LD50 oral rat	> 2500 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	158.31 mg/l/4h
ATE US (vapours)	158.31 mg/l/4h
ATE US (dust,mist)	158.31 mg/l/4h

m-Xylylenediamine (1477-55-0)	
LD50 oral rat	1090 mg/kg
LD50 dermal rat	> 3100 mg/kg
ATE US (oral)	660 mg/kg bodyweight
ATE US (dust,mist)	1.34 mg/l/4h

3-Aminopropyltriethoxysilan (919-30-2)	
LD50 oral rat	1.57 ml/kg
ATE US (oral)	500 mg/kg bodyweight

2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LD50 oral rat	2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rat	> 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)
ATE US (oral)	2169 mg/kg bodyweight

Skin corrosion/irritation	Causes severe skin burns and eye damage. pH: 11.5
Serious eye damage/irritation	Serious eye damage, category 1, implicit pH: 11.5
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified Based on available data, the classification criteria are not met
Carcinogenicity	Not classified

Quartz (SiO2) (14808-60-7)	
IARC group	1 - Carcinogenic to humans

Reproductive toxicity	Not classified Based on available data, the classification criteria are not met
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STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after eye contact	Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water Harmful to aquatic life with long lasting effects.

2-methyl-1,5-pentanediamine (15520-10-2)	
LC50 fish 1	130 mg/l (LC50; 48 h)
LOEC (acute)	1800 mg/l
NOEC (acute)	1000 mg/l
Phenol, styrenated (61788-44-1)	
LC50 fish 1	5.6 mg/l
LC50 other aquatic organisms 1	9.7 mg/l
EC50 Daphnia 1	1.44 mg/l
NOEC (acute)	3.2 mg/l
Threshold limit algae 1	0.326 mg/l (72 h; Algae)
Threshold limit algae 2	0.14 mg/l (72 h; Algae)
m-Xylylenediamine (1477-55-0)	
LC50 fish 1	75 mg/l
LC50 other aquatic organisms 1	20.3 ppb
EC50 Daphnia 1	15 mg/l
LOEC (chronic)	15 mg/l
NOEC (acute)	10.5 mg/kg
NOEC (chronic)	4.7 mg/l
NOEC chronic crustacea	4.7 mg/l
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
LC50 fish 1	> 100 mg/l (96 h; Pisces; Nominal concentration)
EC50 Daphnia 1	10 - 100 mg/l (Invertebrata; Estimated value)
EC50 other aquatic organisms 1	84 mg/l (72 h; Desmodesmus subspicatus; growth rate; ECHA)
LC50 fish 2	70.9 mg/l (96 h; Pisces)
ErC50 (algae)	84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)
Threshold limit algae 1	10 - 100, Algae
Threshold limit algae 2	84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)

12.2. Persistence and degradability

HIT-RE 500 V3, B	
Persistence and degradability	May cause long-term adverse effects in the environment.
Phenol, styrenated (61788-44-1)	
Biochemical oxygen demand (BOD)	0.000231 g O ₂ /g substance

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ADR	IMDG	IATA	RID
N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)	N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)	methyl-1,5-pentanediamine, m-Xylylenediamine)	N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)
Transport document description			
UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II, (E)	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II	UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II	UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II
14.3. Transport hazard class(es)			
8	8	8	8
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	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	<div style="border: 2px solid black; padding: 5px; text-align: center; width: fit-content; margin: 0 auto;"> <div style="background-color: orange; color: black; font-weight: bold; padding: 2px 10px;">80</div> <div style="background-color: orange; color: black; font-weight: bold; padding: 2px 10px;">3259</div> </div>

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
Stowage and segregation (IMDG)	Separated from acids.
MFAG-No	154

- 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
Carriage prohibited (RID)	No

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

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

CANADA

No additional information available

m-Xylylenediamine (1477-55-0)
Listed on the Canadian DSL (Domestic Substances List)
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)
Listed on the Canadian DSL (Domestic Substances List)
Quartz (SiO2) (14808-60-7)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National 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

Component	State or local regulations
2-methyl-1,5-pentanediamine(15520-10-2)	

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Component	State or local regulations
Phenol, styrenated(61788-44-1)	
m-Xylylenediamine(1477-55-0)	
3-Aminopropyltriethoxysilan(919-30-2)	
2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)	
Quartz (SiO2)(14808-60-7)	

SECTION 16: Other information

Revision date 02/25/2019
 Other information None.

Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H335	May cause respiratory irritation.
H350	May cause cancer.

NFPA health hazard

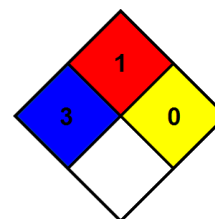
3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

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



Hazard Rating

Health

3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability

1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

B
 B - Safety glasses, Gloves

Indication of changes:

Section	Changed item	Change	Comments
3	Composition/information on ingredients		

SDS_US_Hilti



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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

HIT-RE 500 V3, A

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Date of issue: 02/25/2019

Revision date: 02/25/2019

Supersedes: 08/20/2018

Version: 2.2

SECTION 1: Identification

1.1. Identification

Product form	Mixture
Product name	HIT-RE 500 V3, A
Product code	BU Anchor

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

Use of the substance/mixture	Composite mortar component for fasteners in the construction industry
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1.3. Details of the supplier of the safety data sheet

Supplier

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

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
86916 Kaufering - Deutschland
T +49 8191 906876
anchor.hse@hilti.com

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
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Corr. 1C	H314 - Causes severe skin burns and eye damage.
Skin Sens. 1	H317 - May cause an allergic skin reaction.
Muta. 2	H341 - Suspected of causing genetic defects (oral).
Repr. 1B	H360 - May damage fertility. (oral).

Full text of H statements : see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



GHS05

GHS07

GHS08

Signal word (GHS US)

Danger

Hazard statements (GHS US)

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H341 - Suspected of causing genetic defects (oral).
H360 - May damage fertility. (oral).

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.

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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

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 (SiO ₂)	(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	10-20	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
butanedioldiglycidyl ether	(CAS-No.) 2425-79-8	5 - 10	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317
trimethylolpropane triglycidylether	(CAS-No.) 30499-70-8	5 - 10	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Muta. 2, H341 Repr. 1B, H360 Aquatic Chronic 2, H411
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane	(CAS-No.) 2530-83-8	2.5 - 5	Eye Dam. 1, H318

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

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

4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.
Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.

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4.3. Immediate medical attention and special treatment, if necessary

SECTION 5: Firefighting measures

5.1. 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. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	Spilled material may present a slipping hazard.
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6.1.1. For non-emergency personnel

Emergency procedures	Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	Use personal protective equipment as required. Equip cleanup crew with proper protection.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

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 storage

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.
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Appearance	Thixotropic paste.
Colour	Light grey
Odour	characteristic
Odour threshold	No data available
pH	No data available
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)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Density	1.45 g/cm ³
Solubility	insoluble in water.
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	45 - 59 Pa·s 23 °C

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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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Not classified

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)

butanedioldiglycidyl ether (2425-79-8)

LD50 oral rat	2980 mg/kg (Rat)
LD50 dermal rabbit	1130 mg/kg (Rabbit)
ATE US (oral)	1163 mg/kg bodyweight
ATE US (dermal)	1130 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)

LD50 oral rat	8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)
LD50 dermal rabbit	4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402)
ATE US (oral)	8025 mg/kg bodyweight
ATE US (dermal)	4250 mg/kg bodyweight

2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)

LD50 dermal rat	> 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)
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Skin corrosion/irritation Causes severe skin burns and eye damage.
 Serious eye damage/irritation Serious eye damage, category 1, implicit
 Respiratory or skin sensitisation May cause an allergic skin reaction.
 Germ cell mutagenicity Suspected of causing genetic defects (oral).
 Based on available data, the classification criteria are not met
 Carcinogenicity Not classified

Quartz (SiO2) (14808-60-7)

IARC group	1 - Carcinogenic to humans
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2,2-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)

IARC group	3 - Not classifiable
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Reproductive toxicity May damage fertility. (oral).
 Based on available data, the classification criteria are not met
 STOT-single exposure Not classified
 STOT-repeated exposure Not classified
 Aspiration hazard Not classified
 Potential adverse human health effects and symptoms Based on available data, the classification criteria are not met.
 Symptoms/effects after inhalation May cause an allergic skin reaction.
 Symptoms/effects after skin contact Causes skin irritation.
 Symptoms/effects after eye contact Causes serious eye irritation.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water

Toxic to aquatic life with long lasting effects.

butanedioldiglycidyl ether (2425-79-8)	
LC50 fish 1	24 mg/l (96 h; Pisces) ECHA
LC50 other aquatic organisms 1	> 160 mg/l
NOEC (acute)	40 mg/l
Threshold limit algae 1	88930 mg/l (96 h; Algae)
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
LC50 fish 1	55 mg/l (96 h; Cyprinus carpio; Young)
EC50 Daphnia 1	473 - 710 mg/l (48 h; Daphnia magna)
LC50 fish 2	237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit algae 1	119 mg/l (7 days; Anabaena flosaquae)
Threshold limit algae 2	250 mg/l (72 h; Selenastrum capricornutum)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
LC50 fish 1	1.2 mg/l (96 h; Oncorhynchus mykiss; Lethal)
EC50 Daphnia 1	1.7 mg/l
LC50 fish 2	2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration)
ErC50 (algae)	> 11 mg/l (EPA 660/3 - 75/009, 72 h, Scenedesmus sp., Static system, Fresh water, Experimental value)
Threshold limit algae 1	> 11 mg/l (72 h; Scenedesmus sp.)
Threshold limit algae 2	4.2 mg/l (72 h; Scenedesmus sp.)

12.2. Persistence and degradability

HIT-RE 500 V3, A	
Persistence and degradability	May cause long-term adverse effects in the environment.
butanedioldiglycidyl ether (2425-79-8)	
Biochemical oxygen demand (BOD)	0.01982 g O ₂ /g substance

12.3. Bioaccumulative potential

HIT-RE 500 V3, A	
Bioaccumulative potential	Not established.
butanedioldiglycidyl ether (2425-79-8)	
Log Pow	-0.15
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Log Pow	-0.92 (Estimated value)
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
BCF other aquatic organisms 1	31 (Estimated value, Fresh weight)
Log Pow	>= 2.918 (Experimental value; EU Method A.8: Partition Coefficient; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (BCF < 500).

12.4. Mobility in soil

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Surface tension	58.7 - 58.9 mN/m (20 °C, EU Method A.5: Surface tension)
Log Koc	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Low potential for adsorption in soil.

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
butanedioldiglycidyl ether (2425-79-8)	
EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.
trimethylolpropane triglycidylether (30499-70-8)	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

15.2. International regulations

CANADA

Quartz (SiO2) (14808-60-7)	
Listed on the Canadian DSL (Domestic Substances List)	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
Listed on the Canadian DSL (Domestic Substances List)	
butanedioldiglycidyl ether (2425-79-8)	
Listed on the Canadian DSL (Domestic Substances List)	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)	
Listed on the Canadian DSL (Domestic Substances List)	
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)	
Listed on the Canadian DSL (Domestic Substances List)	

EU-Regulations

No additional information available

National 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

Component	State or local regulations
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)	
butanedioldiglycidyl ether (2425-79-8)	

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Component	State or local regulations
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane(1675-54-3)	
trimethylolpropane triglycidylether (30499-70-8)	
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane(2530-83-8)	
Quartz (SiO ₂)(14808-60-7)	

SECTION 16: Other information

Revision date 02/25/2019

Other information None.

Full text of H-statements:

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
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.
H332	Harmful if inhaled.
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.

NFPA health hazard

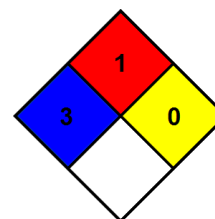
3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard

1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

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



Hazard Rating

Health

3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

Flammability

1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical

1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Personal protection

B

B - Safety glasses, Gloves

Indication of changes:

Section	Changed item	Change	Comments
2.1	GHS-US classification	Modified	
2.2	Hazard statements (GHS US)	Added	
3	Composition/information on ingredients	Modified	



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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