

Version number 8

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1 Identification

- · Product identifier
- · Trade name: Hilti HIT-RE 500
- · Container size: 330 ml, 500 ml
- \cdot Relevant identified uses of the substance or mixture and uses advised against
- \cdot Sector of Use Building and construction work
- · Application of the substance / the mixture Adhesive mortar for rebar and anchor fastenings in solid concrete
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Hilti, Inc.
 5400 South 122nd East Ave.
 US-Tulsa, OK 74146
 Phone: (800) 879-8000
 Fax: (800) 879-7000
 Español: (800) 879-5000
- · Information department:

anchor.hse@hilti.com see section 16

 Emergency telephone number: Chem-Trec
 Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)
 Tel.: 703 527 3887 (Other countries)
 Hilti, Inc.
 Phone: (800) 879-8000
 Fax: (800) 879-7000
 Español: (800) 879-5000

2 Hazard(s) identification

· Classification of the substance or mixture

Eye Dam. 1H318Causes serious eye damage.Aquatic Chronic 2H411Toxic to aquatic life with long lasting effects.	Skin Corr. 1A H31	4 Causes severe skin burns and eye damage.
	Eye Dam. 1 H31	8 Causes serious eye damage.
	Aquatic Chronic 2 H41	1 Toxic to aquatic life with long lasting effects.
Skin Sens. 1 H317 May cause an allergic skin reaction.	Skin Sens. 1 H31	7 May cause an allergic skin reaction.

· Label elements

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



· Signal word Danger

• Hazard-determining components of labeling: m-Xylylenediamine reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)
Reaction product: bisphenol-F epichlorhydrin resin, $MW \le 700$
· Hazard statements
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
Precautionary statements
P260 Do not breathe vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/
shower.
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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Trade name: Hilti HIT-RE 500

	(Contd. of page 1
· Classification system	(contai of page 1
• NFPA ratings (scale 0-4)	
Health $= 3$	
Fire = 1	
3 0 Reactivity = 0	
• Other hazards	
· Results of PBT and vPvB assessment	
• PBT: Not applicable.	
• vPvB: Not applicable.	
· Additional information:	
A	
Information pertaining to particular dangers for man and environment: A	
H315 Causes skin irritation.	
H319 Causes serious eye irritation.	
H317 May cause an allergic skin reaction.	
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H411 Toxic to aquatic life with long lasting effects.	
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 16096-31-4
 1,6-bis(2,3-epoxypropoxy)hexane
 10-25%

 30499-70-8
 Trimethylolpropane, (chloromethyl)oxirane polymer
 2.5-10%

 14808-60-7
 Quartz (SiO2)
 25-50%

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 .
 .

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 Dangerous components B:
 .

 1477, 55.0
 m. Xululanediamina
 .30-40%

14808-60-7 Quartz (SiO2) 15-)%
)%
1344-28-1aluminium oxide5-1	%

• Additional information For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

 \cdot Description of first aid measures

· General information Immediately remove any clothing soiled by the product.

· After inhalation

Take affected persons into fresh air and keep quiet.

Seek medical treatment in case of complaints.

• After skin contact Immediately wash with water and soap and rinse thoroughly.

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⁻ US EN -



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Trade name: Hilti HIT-RE 500

- · After eye contact
- Seek immediate medical advice.
- Rinse opened eye for several minutes under running water. Then consult a doctor.
- Protect unharmed eye.
- Seek medical treatment.
- · After swallowing
- Do not induce vomiting; immediately call for medical help.
- Rinse out mouth and then drink plenty of water.
- · Information for doctor
- \cdot Most important symptoms and effects, both acute and delayed Allergic reactions
- \cdot Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

· Extinguishing media

- \cdot Suitable extinguishing agents
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents Water with full jet.
- **Special hazards arising from the substance or mixture** In case of fire, the following can be released:
- Nitrogen oxides (NOx)
- Nitrogen oxides (NOX)
- Carbon monoxide (CO)
- In certain fire conditions, traces of other toxic gases cannot be excluded.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Wear protective clothing. Ensure adequate ventilation
 Environmental precautions: Do not allow product to reach sewage system or any water course.
- Do not allow to penetrate the ground/soil.
 Methods and material for containment and cleaning up: Pick up mechanically.
 Clean the affected area carefully; suitable cleaners are: organic solvent
 Dispose contaminated material as waste according to item 13.
 Pafarance to other sections.
- Reference to other sections
- See Section 7 for information on safe handling See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

· Handling

- · Precautions for safe handling
- The usual precautionary measures for handling chemicals should be followed.
- Take note of emission threshold.
- Use only in well ventilated areas.
- Check the expiry date: see imprint on manifold (month/year). Do not use expired mortar!
- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.

· Conditions for safe storage, including any incompatibilities

- · Storage
- · Requirements to be met by storerooms and receptacles:
- Keep in a cool, dry and dark place; 41 $^{\circ}F / 5 ^{\circ}C$ to 77 $^{\circ}F / 25 ^{\circ}C$.
- \cdot Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Protect from heat and direct sunlight.
- · Storage class As per VCI (1991) storage classification concept.

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⁻ US EN

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Trade name: Hilti HIT-RE 500

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Exposure controls/personal protection Control parameters Components with limit values that require monitoring at the workplace: The product has a pasty consistency. Exposure limit values for respinable dusts ar not relevant for this product. 1477: 55 on -Sylpenetlamine REI Short-term value: C 0.1 mg/m ³	· Speci	c end use(s) Adhesive mortar for rebar and anchor fastenings in solid concrete
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Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin. Do not eat, drink, smoke or sniff while working. Clean skin throughly immediately after handling the product. Ensure that washing facilities are available at the work place. Keep away from foodstuffs, beverages and feed. Use skin protection cream for skin protection. Do not carry product impregnated cleaning cloths in trouser pockets. Earthing equipment: Not necessary if from is well-ventilated. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. Recommended filter device for short term use: Filter AX Protection of hands: Protective gloves with CE-labeling of category III. EN 374 Avoid direct contact with the chemical/ the product/ the preparation by organizational measures. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Material of gloves Nitrile rubber, NBR Recommended thickness of the material: ≥ 0.4 mm The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer. As the product is a preparation of several substance, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Paretation fine of glove material The sale trong time has to be found out by the manufacturer of the protective gloves and has to be observed. As protection from splashes gloves made of the following materials: Nitrile rubber, NBR Nearent tong this has to be found out by the manufacturer of the application. Paretation fine of glove material The sale trong three has to be found out by the manufacturer of the protective gloves and has to be observed. As protection from splashes gloves made of the following materials: Nitrile rubber, NB		
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Reviewed on 05/18/2015

(Contd. of page 4)

Trade name: Hilti HIT-RE 500

EN 166 / EN 170 • **Body protection:**



*

Protective work clothing.

9 Physical and chemical properties

Information on basic physical and c General Information	nemical properties
Appearance: Form: Color: Odor: Odour threshold:	Pasty Component A: grey Component B: red Mixture: red Amine-like Not determined
pH-value:	Component A: 7 Component B: 11,5 Mixture: 11,5
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Not determined. > 200 °C (> 392 °F)
Flash point:	> 100 °C (> 212 °F) (DIN EN ISO 1523)
Flammability (solid, gaseous)	Not determined
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined Not determined
Vapor pressure at 20 °C (68 °F):	0.04 hPa
Density: Relative density Vapour density Evaporation rate	Component A: 1.5 g/cm ³ (DIN 51757) Component B: 1.4 g/cm ³ (DIN 51757) Not determined Not determined Not determined Not determined
Solubility in / Miscibility with Water:	Insoluble
Partition coefficient (n-octanol/wate	er): Not determined
Viscosity: dynamic at 20 °C (68 °F): kinematic at 20 °C (68 °F):	50 Pas (DIN 53019) >20 s (ISO 2431)
Solvent content: Organic solvents: Water: Other information	0 % 0 % No further relevant information available.

(Contd. on page 6)

Reviewed on 05/18/2015

Trade name: Hilti HIT-RE 500

(Contd. of page 5)

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- \cdot Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:

1477-55-0	m-Xylyle	nediamine
Oral		1040 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

Inhalative LC50/4h 2.4 mg/l (rat)

· Primary irritant effect:

 \cdot on the skin: Strong caustic effect on skin and mucous membranes.

- \cdot on the eye:
- Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- \cdot Sensitization: Sensitization possible through skin contact.
- · Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

- \cdot NTP (National Toxicology Program)
- 14808-60-7 Quartz (SiO2)

12 Ecological information

· Toxicity

25068-38-	6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	
EC50/48h	9.4 mg/l (Algae)	
	1.7 mg/l (magna daphnia)	
EC50/96h	1.2 mg/l (fish)	
28064-14-	4 Reaction product: bisphenol-F epichlorhydrin resin, $MW \le 700$	
EC50/48h	9.4 mg/l (Algae)	
	1.7 mg/l (magna daphnia)	
EC50/96h	1.5 mg/l (fish)	
16096-31-	4 1,6-bis(2,3-epoxypropoxy)hexane	
EC50/48h	23.1 mg/l (Algae)	
	39 mg/l (magna daphnia)	
EC50/96h	17.1 mg/l (fish)	
1477-55-0	m-Xylylenediamine	
EC50/48h	12 mg/l (Algae)	

- US EN

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Reviewed on 05/18/2015

Trade name: Hilti HIT-RE 500

Printing date 05/18/2015

· Class

· IMDG, · Class

2006/11/EC: None General notes: Avoid transfer into the environment. The product contains materials that ar Also poisonous for fish and plankton Toxic for aquatic organisms Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	rther relevant information available. r relevant information available. nformation available. ins the following heavy metals and compounds from the EU guideline NO. re harmful to the environment. in water bodies. tion) (Self-assessment): hazardous for water.
Persistence and degradability No fu Behavior in environmental systems Bioaccumulative potential No further Mobility in soil No further relevant in Ecotoxical effects: Remark: Toxic for fish Additional ecological information: According to the formulation conta 2006/11/EC: None General notes: Avoid transfer into the environment. The product contains materials that ar Also poisonous for fish and plankton Toxic for aquatic organisms Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	: er relevant information available. nformation available. ins the following heavy metals and compounds from the EU guideline NO. re harmful to the environment. in water bodies. ttion) (Self-assessment): hazardous for water.
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Avoid transfer into the environment. The product contains materials that ar Also poisonous for fish and plankton Toxic for aquatic organisms Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	in water bodies. tion) (Self-assessment): hazardous for water.
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Also poisonous for fish and plankton Toxic for aquatic organisms Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	in water bodies. tion) (Self-assessment): hazardous for water.
Toxic for aquatic organisms Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	tion) (Self-assessment): hazardous for water.
Water hazard class 2 (German Regula Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	
Results of PBT and vPvB assessmer PBT: Not applicable. vPvB: Not applicable.	
vPvB: Not applicable.	
Othon advance offerster No funth 1-	
other adverse effects no further rele	evant information available.
	nts containing organic solvents or other dangerous substances resins containing dangerous substances
	gulations on the disposal of packagings.
UN-Number	
	3259 / PG II
ADK, IMDG, IATA	3077 / PG III
ADK, IMDG, IATA	
UN proper shipping name	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xvlvlenediamine)
UN proper shipping name	AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.:
UN proper shipping name	
ADR, IMDG, IATA UN proper shipping name ADR IMDG, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Bisphenol A/F Epoxy Resin) AMINES, SOLID, CORROSIVE, N.O.S (m-Xylylenediamine)
UN proper shipping name ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Bisphenol A/F Epoxy Resin) AMINES, SOLID, CORROSIVE, N.O.S (m-Xylylenediamine) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
UN proper shipping name ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Bisphenol A/F Epoxy Resin) AMINES, SOLID, CORROSIVE, N.O.S (m-Xylylenediamine)
UN proper shipping name ADR IMDG, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. (Bisphenol A/F Epoxy Resin) AMINES, SOLID, CORROSIVE, N.O.S (m-Xylylenediamine) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.
UN proper shipping name ADR	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O. (Bisphenol A/F Epoxy Resin) AMINES, SOLID, CORROSIVE, N.O.S (m-Xylylenediamine) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.

	8 Corrosive substances 9 Miscellaneous dangerous substances and articles.
, IATA	
	8
	9

(Contd. on page 8)



Reviewed on 05/18/2015

Trade name: Hilti HIT-RE 500

	(Contd. of page
Label	8
	9
· Packing group	
· ADR, IMDG, IATA	3259 / PG II
	3077 / PG III
· Environmental hazards:	Not applicable.
· Special precautions for user	Not applicable.
EMS Number:	F-A, S-B
· Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
· IMDG	
· Remarks:	Limited Quantity (LQ)
	1 kg
	5 kg
· IATA	
· Remarks:	Packing Instruction No.
	UN 3259: 859
	UN 3077: 956
	All packed in one
· UN ''Model Regulation'':	Ш
HS-Code:	3214 10 10: Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics

15 Regulatory information

*

	55 (Extremely hazardous substances):	
None of the	ingredients is listed.	
Section 31	3 (Specific toxic chemical listings):	
1344-28-1	aluminium oxide	
TSCA (Tox	cic Substances Control Act):	
14808-60-7	Quartz (SiO2)	
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)	
28064-14-4	Reaction product: bisphenol-F epichlorhydrin resin, $MW \le 700$	
1477-55-0	m-Xylylenediamine	
16096-31-4	1,6-bis(2,3-epoxypropoxy)hexane	
30499-70-8	Trimethylolpropane, (chloromethyl)oxirane polymer	
67762-90-7	FUMED SILICA (SILOXANES AND SILICONES, DI-ME, REACTION PRODUCTS WITH SILICA)	
65997-16-2	Cement, alumina, chemicals	
1344-28-1	aluminium oxide	
Proposition	n 65:	
Chemicals	s known to cause cancer:	
	Quartz (SiO2)	
Canceroger	nity categories	
EPA (Envi	ronmental Protection Agency)	
None of the	ingredients is listed.	
TLV (Thre	shold Limit Value established by ACGIH)	
14808-60-7	Quartz (SiO2)	A
	aluminium oxide	A
1344-28-1		



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Trade name: Hilti HIT-RE 500

	(Contd. of page 8)
· MAK (German Maximum Workplace Concentration)	
14808-60-7 Quartz (SiO2)	1
1344-28-1 aluminium oxide	2

1344-28-1 aluminium oxide

· NIOSH-Ca (National Institute for Occupational Safety and Health)

14808-60-7 Quartz (SiO2)

· National regulations

The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· Information about limitation of use: Employment restrictions concerning young persons must be observed.

· Chemical safety assessment: not required.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases H318 Causes serious eye damage.

· Department issuing SDS:

Hilti Entwicklungsgesellschaft mbH Hiltistrasse 6 D-86916 Kaufering Tel.: +49 8191 906310 Fax: +49 8191 90176310 e-mail: anchor.hse@hilti.com · Contact: Mechthild Krauter · Date of preparation / last revision 05/18/2015 / 7 Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2 * Data compared to the previous version altered.

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