



Hilti HIT-RE100 Epoxy Anchor

(Anchorage) Submission Folder

| | |
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Injectable mortar Hilti HIT-RE 100 **NEW**



BASE MATERIALS

- Concrete (non-cracked)

APPLICATIONS

- Structural connections with post-installed rebar (e.g. extension/ connection to walls, slabs, stairs, columns, foundations, etc.)
- Anchoring structural steel connections (e.g. steel columns, beams, etc.)
- Suitable for underwater applications in hammer-drilled holes

ADVANTAGES

- European Technical Approval covering automatic cleaning of holes drilled using TE-CD or TE-YD drill bits and Hilti vacuum cleaners
- Especially suitable for large-diameter elements and/or deep embedment depths
- Virtually odourless, hence pleasant to work with



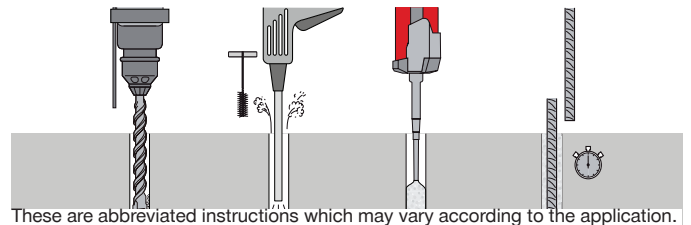
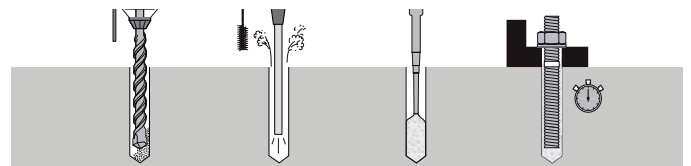
Approvals

ETA

ETA-15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7)

ETA-15/0883 for HIT-RE 100 injection mortar for rebar (ETAG 001-5, Option 1)

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



These are abbreviated instructions which may vary according to the application.

Order Now



| Technical data | |
|--------------------------------------|------------------------------------------------------|
| Material composition | Epoxy Adhesive |
| Base material condition | Dry, submerged, water-filled, wet |
| Tested/approved for diamond drilling | Yes |
| Seismic | No |
| Compatible cartridge holder | CB (Black) |
| Additional product information | Always wear eye protection and gloves while handling |

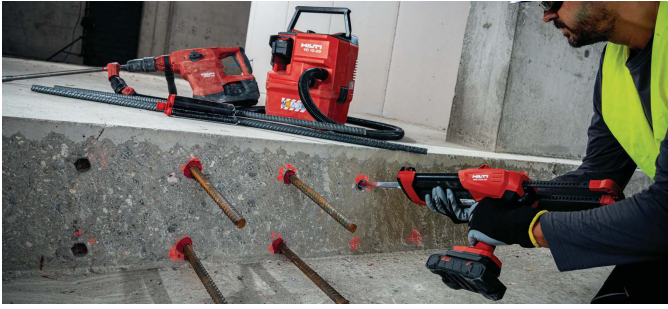
Curing time

| Temperature in the base material T [°C] | Maximum working time t_{work} [min] | Minimum curing time t_{cure} [h] |
|-----------------------------------------|---------------------------------------|------------------------------------|
| -5 to 9 | 120 | 72 |
| 10 to 14 | 90 | 48 |
| 15 to 19 | 30 | 24 |
| 20 to 24 | 25 | 12 |
| 25 to 29 | 20 | 10 |
| 30 to 39 | 12 | 8 |
| 40 | 12 | 4 |

| Ordering designation | Package contents | Sales pack quantity | Item number |
|----------------------------------|--------------------------------------------------------------|---------------------|-------------|
| HIT-RE 100/500/1 INT | 1x Foil pack, 1x Mixer, 1x Mixer extension | 1 pc | 2123386 |
| RE 100/500/1 + HDE A22 Dispenser | 80x Foil pack, 1x Dispenser HDE 500-A22, 1x Cartridge Holder | 1 pc | 3732752 |

Please visit Hilti website for the latest item numbers and related products

Dispenser HDE 500-22



APPLICATIONS

- Injecting Hilti HIT epoxy or adhesive mortar for fastening anchor rods and rebar in concrete and masonry
- Dispensing Hilti firestop foams (only when packaged in compatible soft foil packs)

ADVANTAGES

- Faster anchoring
- Significantly reduce mortar wastage
- Improve fastener safety and reliability
- Repeat and resume functions
- On the Nuron battery platform

Technical data

| | |
|--------------------------------------|-----------------------------------------------------------------------|
| Power source type | Compact B22-55 or B22-85 battery pack |
| Dispenser type | Battery |
| Performance (at 20°C) | 55 sec (RE100 500 ml) |
| B22-55 Battery capacity | 100 cartridges (500 ml) |
| Dimension (L x W x H) | 440mm x 120mm x 230 mm |
| Modes available | Off / continuous / smart discard / measured volume dispensing with ml |
| Dispensing volume per trigger | 1 ml |

Order Now



| Ordering designation | Content per can/cartridge | Sales pack quantity | Item number |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------|----------------|
| HDE 500-22 + CB (Ultimate) 110V | 1x Cordl. dispenser HDE 500-22, 1x Cartridge holder HIT-CB, 1x Battery pack B 22-55, 1x Battery charger C 4-22 110V | 1 pc | 3880132 |
| HDE 500-22 + CR (Ultimate) 110V | 1x Cordl. dispenser HDE 500-22, 1x Cartridge holder HIT-CR, 1x Battery pack B 22-55, 1x Battery charger C 4-22 110V | 1 pc | 3880183 |
| HDE 500-22 + CB (Ultimate) 230V | 1x Cordl. dispenser HDE 500-22, 1x Cartridge holder HIT-CB, 1x Battery pack B 22-55, 1x Battery charger C 4-22 230V | 1 pc | 3880184 |
| HDE 500-22 + CR (Ultimate) 230V | 1x Cordl. dispenser HDE 500-22, 1x Cartridge holder HIT-CR, 1x Battery pack B 22-55, 1x Battery charger C 4-22 230V | 1 pc | 3880186 |
| Battery pack B 22-85 Li-ion | - | 1 pc | 2251351 |
| Battery charger C 4-22 110V | - | 1 pc | 2372874 |
| Battery charger C 4-22 230V | - | 1 pc | 2372873 |

Please visit Hilti website for the latest item numbers and related products

Anchor rod HAS-U 5.8 (Galvanized, grade 5.8)



Approvals

| | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 16/0143 for HIT-RE 500V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



Technical data

| | |
|-----------------------------|------------------------------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, 5.8 grade, zinc-plated (min. 5µm) |
| Material, corrosion | Steel, zinc-plated |

Order Now



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| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U 5.8 M6x75 | M6 | 75mm | 8mm | 7mm | 20pc | 2223936 ¹⁾ |
| HAS-U 5.8 M6x105 | M6 | 105mm | 8mm | 7mm | 20pc | 2223704 ¹⁾ |
| HAS-U 5.8 M8x80 | M8 | 80mm | 10mm | 9mm | 20pc | 2223852 ¹⁾ |
| HAS-U 5.8 M8x110 | M8 | 110mm | 10mm | 9mm | 20pc | 2223853 |
| HAS-U 5.8 M8x150 | M8 | 150mm | 10mm | 9mm | 20pc | 2223854 ¹⁾ |
| HAS-U 5.8 M10x95 | M10 | 95mm | 12mm | 12mm | 20pc | 2223705 ¹⁾ |
| HAS-U 5.8 M10x115 | M10 | 115mm | 12mm | 12mm | 20pc | 2223706 ¹⁾ |
| HAS-U 5.8 M10x130 | M10 | 130mm | 12mm | 12mm | 20pc | 2223707 |
| HAS-U 5.8 M10x170 | M10 | 170mm | 12mm | 12mm | 20pc | 2223709 ¹⁾ |
| HAS-U 5.8 M10x190 | M10 | 190mm | 12mm | 12mm | 20pc | 2223820 ¹⁾ |
| HAS-U 5.8 M12x110 | M12 | 110mm | 14mm | 14mm | 20pc | 2223821 ¹⁾ |
| HAS-U 5.8 M12x120 | M12 | 120mm | 14mm | 14mm | 20pc | 2223822 ¹⁾ |
| HAS-U 5.8 M12x160 | M12 | 160mm | 14mm | 14mm | 20pc | 2223823 |
| HAS-U 5.8 M12x180 | M12 | 180mm | 14mm | 14mm | 20pc | 2223825 ¹⁾ |
| HAS-U 5.8 M12x200 | M12 | 200mm | 14mm | 14mm | 20pc | 2223826 ¹⁾ |
| HAS-U 5.8 M12x220 | M12 | 220mm | 14mm | 14mm | 20pc | 2223827 ¹⁾ |
| HAS-U 5.8 M12x260 | M12 | 260mm | 14mm | 14mm | 20pc | 2223867 ¹⁾ |
| HAS-U 5.8 M12x300 | M12 | 300mm | 14mm | 14mm | 20pc | 2223868 ¹⁾ |
| HAS-U 5.8 M16x150 | M16 | 150mm | 18mm | 18mm | 20pc | 2223828 ¹⁾ |
| HAS-U 5.8 M16x165 | M16 | 165mm | 18mm | 18mm | 20pc | 2223829 ¹⁾ |
| HAS-U 5.8 M16x190 | M16 | 190mm | 18mm | 18mm | 20pc | 2223830 |
| HAS-U 5.8 M16x220 | M16 | 220mm | 18mm | 18mm | 10pc | 2223869 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U 5.8 M16x260 | M16 | 260mm | 18mm | 18mm | 10pc | 2223832 ¹⁾ |
| HAS-U 5.8 M16x300 | M16 | 300mm | 18mm | 18mm | 10pc | 2223870 |
| HAS-U 5.8 M16x350 | M16 | 350mm | 18mm | 18mm | 10pc | 2223871 ¹⁾ |
| HAS-U 5.8 M16x500 | M16 | 500mm | 18mm | 18mm | 10pc | 2223872 ¹⁾ |
| HAS-U 5.8 M20x180 | M20 | 180mm | 22mm | 22mm | 10pc | 2223873 ¹⁾ |
| HAS-U 5.8 M20x240 | M20 | 240mm | 22mm | 22mm | 10pc | 2223874 |
| HAS-U 5.8 M20x260 | M20 | 260mm | 22mm | 22mm | 10pc | 2223876 |
| HAS-U 5.8 M20x300 | M20 | 300mm | 22mm | 22mm | 10pc | 2223877 ¹⁾ |
| HAS-U 5.8 M20x350 | M20 | 350mm | 22mm | 22mm | 10pc | 2223878 ¹⁾ |
| HAS-U 5.8 M20x400 | M20 | 400mm | 22mm | 22mm | 10pc | 2223879 ¹⁾ |
| HAS-U 5.8 M20x480 | M20 | 480mm | 22mm | 22mm | 10pc | 2223880 |
| HAS-U 5.8 M24x300 | M24 | 300mm | 28mm | 26mm | 5pc | 2223881 |
| HAS-U 5.8 M24x450 | M24 | 450mm | 28mm | 26mm | 5pc | 2223882 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

HAS-U 5.8 HDG



| Approvals | | Technical data | |
|--------------|-----------------------------------------------------------------------------------------------------------------------|----------------------|-------------------------------------------|
| ETA | ETA 15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7) | Head configuration | Externally threaded |
| | ETA 16/0143 for HIT-RE 500V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) | Material composition | Steel, 5.8 grade, zinc-plated (min. 43µm) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) | Material, corrosion | Steel, zinc-plated |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.

Order Now

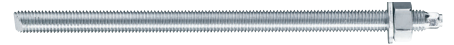


| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|-----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U 5.8 HDG M8x80 | M8 | 80mm | 10mm | 9mm | 20pc | 2223856 ¹⁾ |
| HAS-U 5.8 HDG M8x110 | M8 | 110mm | 10mm | 9mm | 20pc | 2223857 ¹⁾ |
| HAS-U 5.8 HDG M8x150 | M8 | 150mm | 10mm | 9mm | 20pc | 2223858 ¹⁾ |
| HAS-U 5.8 HDG M10x95 | M10 | 95mm | 12mm | 12mm | 20pc | 2223859 ¹⁾ |
| HAS-U 5.8 HDG M10x115 | M10 | 115mm | 12mm | 12mm | 20pc | 2223860 ¹⁾ |
| HAS-U 5.8 HDG M10x130 | M10 | 130mm | 12mm | 12mm | 20pc | 2223861 ¹⁾ |
| HAS-U 5.8 HDG M10x170 | M10 | 170mm | 12mm | 12mm | 20pc | 2223862 ¹⁾ |
| HAS-U 5.8 HDG M10x190 | M10 | 190mm | 12mm | 12mm | 20pc | 2223863 ¹⁾ |
| HAS-U 5.8 HDG M12x110 | M12 | 110mm | 14mm | 14mm | 20pc | 2223937 ¹⁾ |
| HAS-U 5.8 HDG M12x120 | M12 | 120mm | 14mm | 14mm | 20pc | 2223938 ¹⁾ |
| HAS-U 5.8 HDG M12x160 | M12 | 160mm | 14mm | 14mm | 20pc | 2223939 ¹⁾ |
| HAS-U 5.8 HDG M12x180 | M12 | 180mm | 14mm | 14mm | 20pc | 2223940 ¹⁾ |
| HAS-U 5.8 HDG M12x200 | M12 | 200mm | 14mm | 14mm | 20pc | 2223941 ¹⁾ |
| HAS-U 5.8 HDG M12x220 | M12 | 220mm | 14mm | 14mm | 20pc | 2223942 ¹⁾ |
| HAS-U 5.8 HDG M12x260 | M12 | 260mm | 14mm | 14mm | 20pc | 2223895 ¹⁾ |
| HAS-U 5.8 HDG M12x300 | M12 | 300mm | 14mm | 14mm | 20pc | 2223896 ¹⁾ |
| HAS-U 5.8 HDG M16x150 | M16 | 150mm | 18mm | 18mm | 20pc | 2223943 ¹⁾ |
| HAS-U 5.8 HDG M16x165 | M16 | 165mm | 18mm | 18mm | 20pc | 2223944 ¹⁾ |
| HAS-U 5.8 HDG M16x190 | M16 | 190mm | 18mm | 18mm | 20pc | 2223945 ¹⁾ |
| HAS-U 5.8 HDG M16x220 | M16 | 220mm | 18mm | 18mm | 10pc | 2223946 ¹⁾ |
| HAS-U 5.8 HDG M16x260 | M16 | 260mm | 18mm | 18mm | 10pc | 2223897 ¹⁾ |
| HAS-U 5.8 HDG M16x300 | M16 | 300mm | 18mm | 18mm | 10pc | 2223898 ¹⁾ |
| HAS-U 5.8 HDG M16x350 | M16 | 350mm | 18mm | 18mm | 10pc | 2223899 ¹⁾ |
| HAS-U 5.8 HDG M16x500 | M16 | 500mm | 18mm | 18mm | 10pc | 2223900 ¹⁾ |
| HAS-U 5.8 HDG M20x180 | M20 | 180mm | 22mm | 22mm | 10pc | 2223901 ¹⁾ |
| HAS-U 5.8 HDG M20x240 | M20 | 240mm | 22mm | 22mm | 10pc | 2223902 ¹⁾ |
| HAS-U 5.8 HDG M20x260 | M20 | 260mm | 22mm | 22mm | 10pc | 2223903 ¹⁾ |
| HAS-U 5.8 HDG M20x300 | M20 | 300mm | 22mm | 22mm | 10pc | 2223904 ¹⁾ |
| HAS-U 5.8 HDG M20x350 | M20 | 350mm | 22mm | 22mm | 10pc | 2223905 ¹⁾ |
| HAS-U 5.8 HDG M20x400 | M20 | 400mm | 22mm | 22mm | 10pc | 2223906 ¹⁾ |
| HAS-U 5.8 HDG M20x480 | M20 | 480mm | 22mm | 22mm | 10pc | 2223907 ¹⁾ |
| HAS-U 5.8 HDG M24x300 | M24 | 300mm | 28mm | 26mm | 5pc | 2223908 ¹⁾ |
| HAS-U 5.8 HDG M24x450 | M24 | 450mm | 28mm | 26mm | 5pc | 2223909 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Anchor rod HAS-U 8.8 (Galvanized, grade 8.8)



Approvals

| | |
|--------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 16/0143 for HIT-RE 500V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



Technical data

| | |
|----------------------|------------------------------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, 8.8 grade, zinc-plated (min. 5µm) |
| Material, corrosion | Steel, zinc-plated |

Order Now



| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U 8.8 M8x150 | M8 | 150mm | 10mm | 9mm | 20pc | 2223855 ¹⁾ |
| HAS-U 8.8 M10x190 | M10 | 190mm | 12mm | 12mm | 20pc | 2223833 |
| HAS-U 8.8 M12x220 | M12 | 220mm | 14mm | 14mm | 20pc | 2223834 |
| HAS-U 8.8 M12x300 | M12 | 300mm | 14mm | 14mm | 20pc | 2223883 |
| HAS-U 8.8 M16x190 | M16 | 190mm | 18mm | 18mm | 20pc | 2223835 ¹⁾ |
| HAS-U 8.8 M16x300 | M16 | 300mm | 18mm | 18mm | 10pc | 2223884 ¹⁾ |
| HAS-U 8.8 M16x380 | M16 | 380mm | 18mm | 18mm | 10pc | 2223885 |
| HAS-U 8.8 M20x180 | M20 | 180mm | 22mm | 22mm | 10pc | 2223886 ¹⁾ |
| HAS-U 8.8 M20x260 | M20 | 260mm | 22mm | 22mm | 10pc | 2223887 ¹⁾ |
| HAS-U 8.8 M20x400 | M20 | 400mm | 22mm | 22mm | 10pc | 2223888 ¹⁾ |
| HAS-U 8.8 M24x300 | M24 | 300mm | 28mm | 26mm | 5pc | 2223889 ¹⁾ |
| HAS-U 8.8 M27x340 | M27 | 340mm | 30mm | 30mm | 5pc | 2223890 ¹⁾ |
| HAS-U 8.8 M30x380 | M30 | 380mm | 35mm | 33mm | 5pc | 2223891 ¹⁾ |
| HAS-U 8.8 M33x420 | M33 | 420mm | 37mm | 36mm | 5pc | 2223892 ¹⁾ |
| HAS-U 8.8 M36x460 | M36 | 460mm | 40mm | 39mm | 5pc | 2223893 ¹⁾ |
| HAS-U 8.8 M39x510 | M39 | 510mm | 42mm | 42mm | 5pc | 2223894 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

HAS-U 8.8 HDG



Approvals

| | |
|--------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 16/0143 for HIT-RE 500V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



Technical data

| | |
|----------------------|-------------------------------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, 8.8 grade, zinc-plated (min. 43µm) |
| Material, corrosion | Steel, zinc-plated |

Order Now



| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|-----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U 8.8 HDG M8x150 | M8 | 150mm | 10mm | 9mm | 20pc | 2223947 ¹⁾ |
| HAS-U 8.8 HDG M10x190 | M10 | 190mm | 12mm | 12mm | 20pc | 2223948 ¹⁾ |
| HAS-U 8.8 HDG M12x220 | M12 | 220mm | 14mm | 14mm | 20pc | 2223949 ¹⁾ |
| HAS-U 8.8 HDG M12x300 | M12 | 300mm | 14mm | 14mm | 20pc | 2223910 ¹⁾ |
| HAS-U 8.8 HDG M16x190 | M16 | 190mm | 18mm | 18mm | 20pc | 2223703 ¹⁾ |
| HAS-U 8.8 HDG M16x300 | M16 | 300mm | 18mm | 18mm | 10pc | 2223911 ¹⁾ |
| HAS-U 8.8 HDG M16x380 | M16 | 380mm | 18mm | 18mm | 10pc | 2223912 ¹⁾ |
| HAS-U 8.8 HDG M20x180 | M20 | 180mm | 22mm | 22mm | 10pc | 2223913 ¹⁾ |
| HAS-U 8.8 HDG M20x260 | M20 | 260mm | 22mm | 22mm | 10pc | 2223914 ¹⁾ |
| HAS-U 8.8 HDG M20x400 | M20 | 400mm | 22mm | 22mm | 10pc | 2223915 ¹⁾ |
| HAS-U 8.8 HDG M24x300 | M24 | 300mm | 28mm | 26mm | 5pc | 2223916 ¹⁾ |
| HAS-U 8.8 HDG M27x340 | M27 | 340mm | 30mm | 30mm | 5pc | 2223917 ¹⁾ |
| HAS-U 8.8 HDG M30x380 | M30 | 380mm | 35mm | 33mm | 5pc | 2223918 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Anchor rod HAS-U (A4 stainless steel)



Approvals

| | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 15/0882 for HIT-RE 100 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 16/0143 for HIT-RE 500V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.

Technical data

| | |
|-----------------------------|---------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, A4 (SS316) |
| Material, corrosion | Steel, stainless |

Order Now



| Ordering designation | Anchor size | Anchor length | Drill bit diameter | Base plate clearance hole | Sales pack quantity | Item number |
|----------------------|-------------|---------------|--------------------|---------------------------|---------------------|-----------------------|
| HAS-U A4 M8x80 | M8 | 80mm | 10mm | 9mm | 20pc | 2223864 |
| HAS-U A4 M8x110 | M8 | 110mm | 10mm | 9mm | 20pc | 2223865 |
| HAS-U A4 M8x150 | M8 | 150mm | 10mm | 9mm | 20pc | 2223866 |
| HAS-U A4 M10x95 | M10 | 95mm | 12mm | 9mm | 20pc | 2223836 |
| HAS-U A4 M10x115 | M10 | 115mm | 12mm | 12mm | 20pc | 2223837 ¹⁾ |
| HAS-U A4 M10x130 | M10 | 130mm | 12mm | 12mm | 20pc | 2223838 |
| HAS-U A4 M10x170 | M10 | 170mm | 12mm | 12mm | 20pc | 2223839 ¹⁾ |
| HAS-U A4 M10x190 | M10 | 190mm | 12mm | 12mm | 20pc | 2223840 |
| HAS-U A4 M10x220 | M10 | 220mm | 12mm | 12mm | 20pc | 2223841 ¹⁾ |
| HAS-U A4 M12x110 | M12 | 110mm | 14mm | 14mm | 20pc | 2223842 ¹⁾ |
| HAS-U A4 M12x120 | M12 | 120mm | 14mm | 14mm | 20pc | 2223843 ¹⁾ |
| HAS-U A4 M12x160 | M12 | 160mm | 14mm | 14mm | 20pc | 2223844 |
| HAS-U A4 M12x180 | M12 | 180mm | 14mm | 14mm | 20pc | 2223845 ¹⁾ |
| HAS-U A4 M12x200 | M12 | 200mm | 14mm | 14mm | 20pc | 2223846 ¹⁾ |
| HAS-U A4 M12x220 | M12 | 220mm | 14mm | 14mm | 20pc | 2223847 |
| HAS-U A4 M12x260 | M12 | 260mm | 14mm | 14mm | 20pc | 2223919 ¹⁾ |
| HAS-U A4 M12x300 | M12 | 300mm | 14mm | 14mm | 20pc | 2223920 |
| HAS-U A4 M16x150 | M16 | 150mm | 18mm | 18mm | 20pc | 2223848 ¹⁾ |
| HAS-U A4 M16x165 | M16 | 165mm | 18mm | 18mm | 20pc | 2223849 ¹⁾ |
| HAS-U A4 M16x190 | M16 | 190mm | 18mm | 18mm | 20pc | 2223850 |
| HAS-U A4 M16x220 | M16 | 220mm | 18mm | 18mm | 20pc | 2223851 |
| HAS-U A4 M16x260 | M16 | 260mm | 18mm | 18mm | 10pc | 2223921 ¹⁾ |
| HAS-U A4 M16x300 | M16 | 300mm | 18mm | 18mm | 10pc | 2223922 ¹⁾ |
| HAS-U A4 M16x350 | M16 | 350mm | 18mm | 18mm | 10pc | 2223923 ¹⁾ |
| HAS-U A4 M16x380 | M16 | 380mm | 18mm | 18mm | 10pc | 2223924 |
| HAS-U A4 M20x180 | M20 | 180mm | 22mm | 22mm | 10pc | 2223925 ¹⁾ |
| HAS-U A4 M20x240 | M20 | 240mm | 22mm | 22mm | 10pc | 2223926 |
| HAS-U A4 M20x260 | M20 | 260mm | 22mm | 22mm | 10pc | 2223927 |
| HAS-U A4 M20x300 | M20 | 300mm | 22mm | 22mm | 10pc | 2223928 ¹⁾ |
| HAS-U A4 M20x350 | M20 | 350mm | 22mm | 22mm | 10pc | 2223929 ¹⁾ |
| HAS-U A4 M20x400 | M20 | 400mm | 22mm | 22mm | 10pc | 2223930 ¹⁾ |
| HAS-U A4 M20x480 | M20 | 480mm | 22mm | 22mm | 10pc | 2223931 |
| HAS-U A4 M24x300 | M24 | 300mm | 28mm | 26mm | 5pc | 2223932 |
| HAS-U A4 M24x450 | M24 | 450mm | 28mm | 26mm | 5pc | 2223933 ¹⁾ |
| HAS-U A4 M27x340 | M27 | 340mm | 30mm | 30mm | 5pc | 2223934 ¹⁾ |
| HAS-U A4 M30x380 | M30 | 380mm | 35mm | 33mm | 5pc | 2223935 ¹⁾ |

¹⁾ For detailed stock availability and lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Internally threaded sleeve HIS-N (Galvanized, grade 5.8)



Approvals

| | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 04/0027 for HIT-RE 500 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 04/0027 for HIT-RE 500 V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



Technical data

| | |
|-----------------------------|-------------------------------------------|
| Head configuration | Inner thread |
| Material composition | Steel, 5.8 grade, zinc-plated (min. 5 µm) |
| Material, corrosion | Steel, zinc-plated |
| Anchor type | Internally threaded |

Order Now



| Ordering designation | Anchor size | Drill bit diameter | Drilling depth | Base plate clearance hole | Sales pack quantity | Item number |
|----------------------|-------------|--------------------|----------------|---------------------------|---------------------|----------------------------|
| HIS-N M8x90 | M8 | 14 mm | 90 mm | 9 mm | 10 pc | 258015¹⁾ |
| HIS-N M10x110 | M10 | 18 mm | 110 mm | 12 mm | 10 pc | 258016¹⁾ |
| HIS-N M12x125 | M12 | 22 mm | 125 mm | 14 mm | 5 pc | 258017¹⁾ |
| HIS-N M16x170 | M16 | 28 mm | 170 mm | 18 mm | 5 pc | 258018¹⁾ |
| HIS-N M20x205 | M20 | 32 mm | 205 mm | 22 mm | 5 pc | 258019¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Internally threaded sleeve HIS-RN (A4 stainless steel)



Approvals

| | |
|---------------------|-----------------------------------------------------------------------------------------------------------------------|
| ETA | ETA 04/0027 for HIT-RE 500 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| | ETA 04/0027 for HIT-RE 500 V3 injection mortar for anchoring applications (ETAG 001-05, Option 7) |
| ETA, seismic | ETA 12/0084 for HIT-HY 200-R injection mortar and standard element for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.



Technical data

| | |
|-----------------------------|---------------------|
| Head configuration | Inner thread |
| Material composition | Steel, A4 (SS316) |
| Material, corrosion | Steel, stainless |
| Anchor type | Internally threaded |

Order Now



| Ordering designation | Anchor size | Drill bit diameter | Drilling depth | Base plate clearance hole | Sales pack quantity | Item number |
|--------------------------|-------------|--------------------|----------------|---------------------------|---------------------|----------------------------|
| HIS-RN M8x90 A4 | M8 | 14 mm | 90 mm | 9 mm | 10 pc | 258024¹⁾ |
| HIS-RN M10x110 A4 | M10 | 18 mm | 110 mm | 12 mm | 10 pc | 258025 |
| HIS-RN M12x125 A4 | M12 | 22 mm | 125 mm | 14 mm | 5 pc | 258026 |
| HIS-RN M16x170 A4 | M16 | 28 mm | 170 mm | 18 mm | 5 pc | 258027¹⁾ |
| HIS-RN M20x205 A4 | M20 | 32 mm | 205 mm | 22 mm | 5 pc | 258028¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Anchor rod HIT-Z (Galvanized)



SAFESET



Approvals

| | |
|---------------------|-------------------------------------------------------------------------------------------------------------------|
| ETA, seismic | ETA 12/0006 for HIT-HY 200-A injection mortar and HIT-Z(R) rod for anchoring applications (ETAG 001-05, Option 1) |
| | ETA 12/0006 for HIT-HY 200-R injection mortar and HIT-Z(R) rod for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.

Technical data

| | |
|---------------------------------------------|--------------------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, zinc-plated (min. 5 µm) |
| Material, corrosion | Steel, zinc-plated |
| Anchor type | Off-the-shelf rods |
| Approvals / test reports | ETA |
| Tested/approved for diamond drilling | Yes |



Order Now **Watch Video**



| Ordering designation | Anchor size | Drill bit diameter | Max. fixture thickness at standard embedment depth | Base plate clearance hole | Required tightening torque | Sales pack quantity | Item number |
|----------------------|-------------|--------------------|----------------------------------------------------|---------------------------|----------------------------|---------------------|-----------------------|
| HIT-Z M8x80 | M8 | 10 mm | 8 mm | 9 mm | 10 Nm | 40 pc | 2018364 ¹⁾ |
| HIT-Z M8x100 | M8 | 10 mm | 28 mm | 9 mm | 10 Nm | 40 pc | 2018365 |
| HIT-Z M8x120 | M8 | 10 mm | 48 mm | 9 mm | 10 Nm | 40 pc | 2018366 ¹⁾ |
| HIT-Z M10x95 | M10 | 12 mm | 22 mm | 12 mm | 25 Nm | 40 pc | 2018367 ¹⁾ |
| HIT-Z M10x115 | M10 | 12 mm | 42 mm | 12 mm | 25 Nm | 40 pc | 2018368 |
| HIT-Z M10x135 | M10 | 12 mm | 62 mm | 12 mm | 25 Nm | 40 pc | 2018369 |
| HIT-Z M10x160 | M10 | 12 mm | 87 mm | 12 mm | 25 Nm | 40 pc | 2018410 ¹⁾ |
| HIT-Z M12x105 | M12 | 14 mm | 29 mm | 14 mm | 40 Nm | 20 pc | 2018411 ¹⁾ |
| HIT-Z M12x140 | M12 | 14 mm | 64 mm | 14 mm | 40 Nm | 20 pc | 2018412 ¹⁾ |
| HIT-Z M12x155 | M12 | 14 mm | 79 mm | 14 mm | 40 Nm | 20 pc | 2018413 |
| HIT-Z M12x196 | M12 | 14 mm | 120 mm | 14 mm | 40 Nm | 20 pc | 2018415 ¹⁾ |
| HIT-Z M16x155 | M16 | 18 mm | 38 mm | 18 mm | 80 Nm | 12 pc | 2018416 ¹⁾ |
| HIT-Z M16x175 | M16 | 18 mm | 58 mm | 18 mm | 80 Nm | 12 pc | 2018417 ¹⁾ |
| HIT-Z M16x205 | M16 | 18 mm | 88 mm | 18 mm | 80 Nm | 12 pc | 2018418 ¹⁾ |
| HIT-Z M16x240 | M16 | 18 mm | 123 mm | 18 mm | 80 Nm | 12 pc | 2018419 ¹⁾ |
| HIT-Z M20x215 | M20 | 22 mm | 91 mm | 22 mm | 150 Nm | 6 pc | 2018420 |
| HIT-Z M20x250 | M20 | 22 mm | 126 mm | 22 mm | 150 Nm | 6 pc | 2018421 ¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Anchor rod HIT-Z-R (A4 stainless steel)



SAFESET



Approvals

| | |
|---------------------|-------------------------------------------------------------------------------------------------------------------|
| ETA, seismic | ETA 12/0006 for HIT-HY 200-A injection mortar and HIT-Z(R) rod for anchoring applications (ETAG 001-05, Option 1) |
| | ETA 12/0006 for HIT-HY 200-R injection mortar and HIT-Z(R) rod for anchoring applications (ETAG 001-05, Option 1) |

Approvals and test reports may apply to selected products only. Please refer to the documents for details.

Technical data

| | |
|---------------------------------------------|---------------------|
| Head configuration | Externally threaded |
| Material composition | Steel, A4 (SS316) |
| Material, corrosion | Steel, stainless |
| Anchor type | Off-the-shelf rods |
| Approvals / test reports | ETA |
| Tested/approved for diamond drilling | Yes |



Order Now



| Ordering designation | Anchor size | Drill bit diameter | Max. fixture thickness at standard embedment depth | Required tightening torque | Sales pack quantity | Item number |
|----------------------|-------------|--------------------|----------------------------------------------------|----------------------------|---------------------|-----------------------|
| HIT-Z-R M8x80 | M8 | 10 mm | 8 mm | 10 Nm | 40 pc | 2018422 ¹⁾ |
| HIT-Z-R M8x100 | M8 | 10 mm | 28 mm | 10 Nm | 40 pc | 2018423 ¹⁾ |
| HIT-Z-R M8x120 | M8 | 10 mm | 48 mm | 10 Nm | 40 pc | 2018424 ¹⁾ |
| HIT-Z-R M10x95 | M10 | 12 mm | 22 mm | 25 Nm | 40 pc | 2018425 |
| HIT-Z-R M10x115 | M10 | 12 mm | 42 mm | 25 Nm | 40 pc | 2018426 |
| HIT-Z-R M10x135 | M10 | 12 mm | 62 mm | 25 Nm | 40 pc | 2018427 |
| HIT-Z-R M10x160 | M10 | 12 mm | 87 mm | 25 Nm | 40 pc | 2018428 ¹⁾ |
| HIT-Z-R M12x105 | M12 | 14 mm | 29 mm | 40 Nm | 20 pc | 2018429 ¹⁾ |
| HIT-Z-R M12x140 | M12 | 14 mm | 64 mm | 40 Nm | 20 pc | 2018430 ¹⁾ |
| HIT-Z-R M12x155 | M12 | 14 mm | 79 mm | 40 Nm | 20 pc | 2018431 ¹⁾ |
| HIT-Z-R M12x196 | M12 | 14 mm | 120 mm | 40 Nm | 20 pc | 2018433 ¹⁾ |
| HIT-Z-R M16x155 | M16 | 18 mm | 38 mm | 80 Nm | 12 pc | 2018434 ¹⁾ |
| HIT-Z-R M16x175 | M16 | 18 mm | 58 mm | 80 Nm | 12 pc | 2018435 ¹⁾ |
| HIT-Z-R M16x205 | M16 | 18 mm | 88 mm | 80 Nm | 12 pc | 2018436 |
| HIT-Z-R M16x240 | M16 | 18 mm | 123 mm | 80 Nm | 12 pc | 2018437 ¹⁾ |
| HIT-Z-R M20x215 | M20 | 22 mm | 91 mm | 150 Nm | 6 pc | 2018438 ¹⁾ |
| HIT-Z-R M20x250 | M20 | 22 mm | 126 mm | 150 Nm | 6 pc | 2018439 ¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Safety glasses



Technical data

| | |
|---------------|---------------------|
| Lens | PC material |
| Thickness | 2.1 mm |
| Coating | Optidur NCH coating |
| Filter | 2C-1.2 |
| Impact energy | 45 m/s |

Order Now



| Ordering designation | Sales pack quantity | Item number |
|-----------------------------------|---------------------|-------------|
| Safety glasses PP EY-CA NCH clear | 1 pc | 2065449 |

Please visit Hilti website for the latest item numbers and related products

Accessories for blowing out



APPLICATIONS

- For fast and efficient removal of dust and debris from drilled holes of varying diameters and depths to allow correct installation of anchors and rebar

Technical data

| | |
|-------------------------------------------------|----------------------|
| Dispenser, setting tool, accessory, tester type | Cleaning accessories |
|-------------------------------------------------|----------------------|

Order Now



| Ordering designation | Sales pack quantity | Item number |
|------------------------------|---------------------|----------------------|
| Blow-out pump | 1 pc | 60579 |
| Extension tube HIT-VL 16/0.7 | 10 pc | 336646 ¹⁾ |

Please visit Hilti website for the latest item numbers and related products

Accessories for blowing out (Air nozzle)



APPLICATIONS

- Clearing dust and debris from drilled holes under various conditions including where adhesive anchors are set at great depth

ADVANTAGES

- Fast, effective cleaning of drilled holes

Technical data

| | |
|-------------------------------------------------|----------------------|
| Dispenser, setting tool, accessory, tester type | Cleaning accessories |
|-------------------------------------------------|----------------------|

Order Now

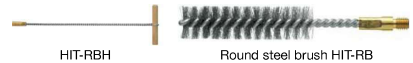


| Ordering designation | Drill hole diameter | Sales pack quantity | Item number |
|----------------------|---------------------|---------------------|----------------------|
| Air nozzle HIT-DL 20 | 20 mm | 1 pc | 371719 ¹⁾ |
| Air nozzle HIT-DL 25 | 25 mm | 1 pc | 371720 ¹⁾ |
| Air nozzle HIT-DL 32 | 32 mm | 1 pc | 371721 ¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Accessories for brushing



APPLICATIONS

- For the proper brushing of drilled holes of varying diameters and embedment depths

Technical data

| | |
|-------------------------------------------------|----------------------|
| Dispenser, setting tool, accessory, tester type | Cleaning accessories |
|-------------------------------------------------|----------------------|

Order Now



| Ordering designation | Package contents | Sales pack quantity | Item number |
|---------------------------------|-----------------------------------------------------------------------------|---------------------|----------------------|
| Brush extension HIT-RBH | 30 cm extension with handle for manual cleaning fitting to all RB diameter. | 1 pc | 229138 |
| Brush extension HIT-RBV | 30 cm extension used between RBH (handle) and all RB diameter. | 1 pc | 238727 ¹⁾ |
| Brush extension HIT-RBS-10/0.35 | 35 cm extension for machine cleaning fitting to all RB diameter. | 1 pc | 371722 ¹⁾ |
| Holder TE-C | Connection end for C and SDS end. Works with RBS. | 1 pc | 263437 ¹⁾ |
| Holder TE-Y | Connection end for Y end. Works with RBS. | 1 pc | 263439 ¹⁾ |
| Round steel brush HIT-RB 12 | Brush diameter - 12 mm. Use with HIT-RBH/RBV | 1 pc | 336548 |
| Round steel brush HIT-RB 16 | Brush diameter - 16 mm. Use with HIT-RBH/RBV | 1 pc | 336550 ¹⁾ |
| Round steel brush HIT-RB 20 | Brush diameter - 20 mm. Use with HIT-RBH/RBV | 1 pc | 336550 |
| Round steel brush HIT-RB 25 | Brush diameter - 25 mm. Use with HIT-RBH/RBV | 1 pc | 336553 ¹⁾ |
| Round steel brush HIT-RB 32 | Brush diameter - 32 mm. Use with HIT-RBH/RBV | 1 pc | 336554 |
| Round steel brush HIT-RB 40 | Brush diameter - 40 mm. Use with HIT-RBH/RBV | 1 pc | 382260 ¹⁾ |
| Round steel brush HIT-RB 52 | Brush diameter - 52 mm. Use with HIT-RBH/RBV | 1 pc | 382265 |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Accessories for injection in deep / overhead holes application



APPLICATIONS

- For injection of Hilti HIT adhesive mortars in a variety of situations including deep holes, overhead holes and in underwater applications

ADVANTAGES

- Injection pistons and flexible extension hoses help ensure consistent injection of the adhesive into the hole without formation of air voids

| Technical data | |
|-------------------------------------------------|----------------------|
| Dispenser, setting tool, accessory, tester type | Cleaning accessories |

Order Now



| Ordering designation | Drill hole diameter | Sales pack quantity | Item number |
|-----------------------------------|---------------------|---------------------|-----------------------|
| Hose HIT-VL 11/1,0 (Plastic tube) | - | 10 pc | 2042533 ¹⁾ |
| Coupler VL-K (connect HIT-VL) | - | 10 pc | 335021 ¹⁾ |
| Piston plug HIT-SZ 20 | 20 mm | 10 pc | 2039312 |
| Piston plug HIT-SZ 25 | 25 mm | 10 pc | 2039315 |
| Piston plug HIT-SZ 30 | 30 mm | 10 pc | 2039317 |
| Piston plug HIT-SZ 40 | 40 mm | 10 pc | 2039325 ¹⁾ |
| Piston plug HIT-SZ 47 | 47 mm | 10 pc | 2039332 ¹⁾ |

¹⁾ This is a non-stock item. For detailed lead time information please contact your Hilti representative.

Please visit Hilti website for the latest item numbers and related products

Accessories for overhead applications



| Technical data | |
|-------------------------------------------------|------------------------------------------|
| Dispenser, setting tool, accessory, tester type | Mixing nozzles and injection accessories |

Order Now



| Ordering designation | Sales pack quantity | Item number |
|----------------------------------------------|---------------------|-------------|
| Drip guard HIT-OHC1 (for fastener Ø10-20 mm) | 10 pc | 387551 |
| Drip guard HIT-OHC2 (for fastener Ø22-32 mm) | 10 pc | 387552 |
| Wedge HIT-OHW | 100 pc | 387550 |

Please visit Hilti website for the latest item numbers and related products

Mixers for Hilti injectable (RE&HY)



| Technical data | |
|-------------------------------------------------|------------------------------------------|
| Dispenser, setting tool, accessory, tester type | Mixing nozzles and injection accessories |

Order Now



| Ordering designation | Sales pack quantity | Item number |
|-----------------------------|---------------------|-------------|
| Mixers HIT-RE-M (for RE&HY) | 1 pc | 337111 |

Please visit Hilti website for the latest item numbers and related products

Hilti online: www.hilti.com.hk

HILTI SAFE-SET TECHNOLOGY

A small step for engineers.
And a giant leap forward for your next design.

Now you can design anchor rod and post-installed rebar connections with more confidence. Inadequately cleaning holes during installation can reduce the performance of conventional chemical anchor systems significantly. Hilti **SAFE-SET** Technology eliminates this factor almost entirely – in both cracked or uncracked concrete and with anchor rods or post-installed rebar.

APPLICATIONS



- Post-installed rebar connections for concrete slab, column or wall extensions
- Heavy-duty anchoring in cracked or uncracked concrete, e.g. for steel beams, column

WHAT IS SAFE-SET

Hilti **SAFE-SET** Technology eliminates the most load-affecting and time-consuming step in the installation process: cleaning the hole before injection of the adhesive. As a consequence, engineers can now have peace of mind because the specified application will perform on the jobsite as it has been designed in the plan.



SAFE-SET Application Ranges

| | | Thread rod size | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | Drill hole dia. | (10mm) | (12mm) | (14mm) | (18mm) | (22mm) | (28mm) | (30mm) | (35mm) |
| Anchoring  | HIT-HY 200-R, standard drill bit and HIT-Z Rod (zero cleaning) | SAFE-SET | | | | | | | | |
| | HIT-HY 200-R, HIT-RE100, HIT-RE 500 V3, Hollow Drill Bits and HAS-E Rod, HAS-U Rod or HIT-V Rod (auto-cleaning) | SAFE-SET | | | | | | | | |
| Rebar  | HIT-HY 200-R, HIT-RE100, HIT-RE 500 V3, Hollow Drill Bits and rebar (auto-cleaning) | SAFE-SET | | | | | | | | |
| | | Rebar size | Y8 | Y10 | Y12 | Y16 | Y20 | Y25 | Y32 | |
| | | Drill hole dia. | (12mm) | (14mm) | (16mm) | (20mm) | (25mm) | (32mm) | (40mm) | |

INTRODUCING HILTI SAFESET TECHNOLOGY

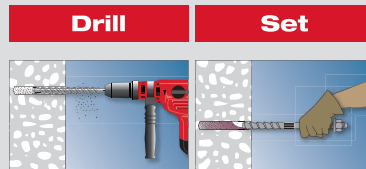
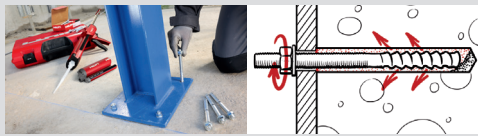
Once in a blue moon, something comes along with the power to accelerate the way you work.

SAFESET

SAFEset is a registered trade mark of Hilti.

1 ZERO CLEANING SOLUTION. HIT-Z anchor rods + HIT-HY 200-R

The new Hilti HIT-Z anchor rod works as a torque-controlled bonded anchor. Because of their unique shape, HIT-Z anchor rods, used in hammer-drilled holes in dry or water-saturated concrete above 5°C, are not affected by uncleared holes. The benefits are clear: fewer steps and more productivity in anchoring applications.



Hilti **SAFESET** Technology
Up to 60% faster!

| Drill | Done | Productivity gain |
|--------------------------------|--------------------------------|-------------------|
| Anchor diameter range | M8 to M20 | |
| Material | Carbon or stainless steel (A4) | |
| Embedment depth | Up to 12 times rod diameter | |
| Concrete compressive strengths | C20/25 to C50/60 | |
| Installation temperature range | 5°C to 40°C | |



2 AUTO-CLEANING SOLUTION. Hollow drill bits + HIT-HY 200-R / HIT-RE 100 / HIT-RE 500 V3

Hilti TE-CD and TE-YD hollow drill bits, in conjunction with HIT-HY 200-R, HIT-RE 100 or HIT-RE 500 V3, make subsequent hole cleaning completely unnecessary. Dust is removed by the Hilti vacuum system while drilling is in progress for faster drilling and a virtually dustless working environment.



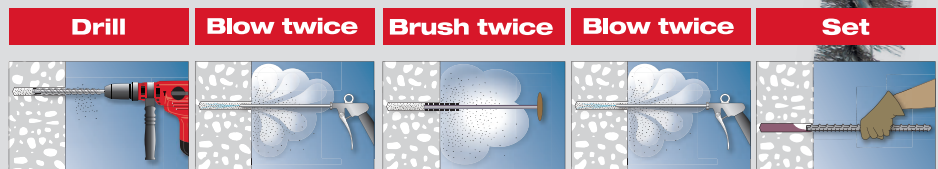
Hilti **SAFESET** Technology
Up to 60% faster!

| Drill | Done | Productivity gain |
|--------------------------------|------------------|-------------------|
| Rebar diameter range | Y8 to Y25 | |
| Threaded rod diameters | M10 to M30 | |
| Embedment depth | Up to 1000 mm | |
| Concrete compressive strengths | C20/25 to C50/60 | |
| Installation temperature range | -10°C to 40°C | |



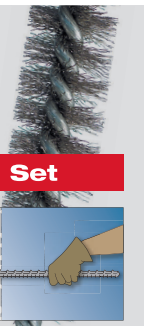
3 CONVENTIONAL SOLUTION. Brush and blow

Another option is to continue using the traditional hole cleaning method with any Hilti HIT system for superior performance.



*Cleaning Sequence when using manual dust pump are : blow twice , brush twice , blow twice.

| Drill | 2x | 2x | 2x | Done |
|--------------------------------|---------------------------------|----|----|------|
| Rebar diameter range | Y8 to Y40 | | | |
| Threaded rod diameters | M8 to M39 | | | |
| Embedment depth | Up to 20 times element diameter | | | |
| Concrete compressive strengths | C20/25 to C50/60 | | | |
| Installation temperature range | -10°C to 40°C | | | |









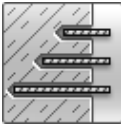





SUMMARY TABLE FOR CHEMICAL ANCHORS

| | | HIT-HY 200-R | HIT-RE 500 V3 | HIT-RE 100 | HIT-HY 270 |
|--------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  | |  |  |  |
| HIT-Z |  |  | | | |
| HAS-U |  |  |  |  |  |
| HIS-N |  |  |  |  |  |
| Setting tool TE-C |  | | | | |
| Setting tool HIS-S |  | | | | |
| Mixer HIT-RE-M |  |  |  |  |  |
| Profi accessories for HIT |  |  |  |  |  |
| HIT-SC |  | | | |  |
| CR Cartridge holder |  |  | | | |
| CB Cartridge holder |  | |  |  |  |
| HDE Dispenser |  |  |  |  |  |
| TE-CD/YD Hollow drill bit |  |  |  |  | |
| VC 20/40 Vacuum cleaner |  |  |  |  | |
| Setting tool TE-C-E/ TE-Y-E |  | | | | |
| Blow-out pump |  |  |  |  |  |
| Steel brush |  |  |  |  |  |

HIT-RE 100 injection mortar

Anchor design (ETAG 001) / Rods&Sleeves / Concrete

| Injection mortar system | | Benefits |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Hilti HIT-RE 100 500 ml foil pack (also available as 330 ml foil pack)</p> | <ul style="list-style-type: none"> - Suitable for non-cracked concrete C 20/25 to C 50/60 - High loading capacity - Suitable for dry and water saturated concrete - Large diameter applications - Long working time at elevated temperatures - Odourless epoxy |
|  | <p>Anchor rods: HAS-(U) HAS-(U)-R HAS-(U)-HCR (M8-M30)</p> | |

| Base material | Load conditions |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  Concrete (non-cracked)  Dry concrete  Wet concrete |  Static/ quasi-static |
| Installation conditions | Other informations |
|  Hammer drilling  Variable embedment depth  Small edge distance and spacing |  European Technical Assessment  CE conformity  A4 316 Corrosion resistance  HCR highMo High corrosion resistance |

Approvals / certificates

| Description | Authority / Laboratory | No. / date of issue |
|---------------------------------------------|------------------------|-------------------------|
| European technical assessment ^{a)} | DIBt, Berlin | ETA-15/0882 / 2019-8-30 |

a) All data given in this section according to ETA-15/0882 issue 2019-8-30.

Recommended general notes

* The below clauses based on Hilti product qualifications are for references only. Selection of clauses by the engineer shall be based on the specific application needs. Please contact Hilti's technical team for further details.

- Adhesive mortar shall be foilpack two-component ready mix epoxy resin (styrene-free).
- Anchor shall be approved for overhead installation.
- For overhead or deep embedment depth (>250mm) installation, specialized accessories shall be applied to ensure drill hole is fully grouted with no voids.
- Borehole drilled and cleaned in one step with Hilti hollow drill bit is recommended to reduce installation error.
- Anchors shall obtain the European Technical Assessment (ETA) report.
- The anchor bolt design shall be done either according to "ETAG001 Annex C Design Method" issued by EOTA or "Guides on design of post-installed anchor bolt systems in Hong Kong" issued by HKISC.
- Anchors shall be tested in accordance to either ETAG-001 Annex A or ACI 355.2 by accredited laboratories under HOKLAS Mutual Recognition Arrangement (MRA) Partners.
- Anchor to be approved by WRAS and NSF for use in contact with drinking water.

Static and quasi-static loading (for a single anchor)

All data in this section applies to

- Correct setting (See setting instruction)
- No edge distance and spacing influence
- Steel failure
- Anchor HIT-V and HAS-(E,U) with strength 5.8
- Base material thickness, as specified in the table
- One typical embedment depth, as specified in the table
- Concrete C 20/25, $f_{ck,cube} = 25 \text{ N/mm}^2$
- Temperate range I
(min. base material temperature -40°C, max. long term/short term base material temperature: +24°C/40°C)

Embedment depth and base material thickness

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|-------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| Typical embedment depth | [mm] | 80 | 90 | 110 | 125 | 170 | 210 | 240 | 270 |
| Base material thickness | [mm] | 110 | 120 | 140 | 165 | 220 | 270 | 300 | 340 |

Characteristic resistance

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|-----------------------------|-----------------------|------|------|------|------|-------|-------|-------|-------|
| Non-cracked concrete | | | | | | | | | |
| Tension N_{Rk} | HIT-V, HAS-(E,U) [kN] | 18,3 | 29,0 | 42,2 | 70,6 | 111,9 | 153,7 | 187,8 | 224,0 |
| Shear V_{Rk} | HIT-V, HAS-(E,U) [kN] | 9,2 | 14,5 | 21,1 | 39,3 | 61,3 | 88,3 | 114,8 | 140,3 |

Design resistance

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|-----------------------------|-----------------------|------|------|------|------|------|------|------|-------|
| Non-cracked concrete | | | | | | | | | |
| Tension N_{Rd} | HIT-V, HAS-(E,U) [kN] | 12,2 | 19,3 | 27,7 | 33,6 | 53,3 | 73,2 | 89,4 | 106,7 |
| Shear V_{Rd} | HIT-V, HAS-(E,U) [kN] | 7,3 | 11,6 | 16,9 | 31,4 | 49,0 | 70,6 | 91,8 | 112,2 |

Recommended loads ^{a)}

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|-----------------------------|-----------------------|-----|-----|------|------|------|------|------|------|
| Non-cracked concrete | | | | | | | | | |
| Tension N_{Rec} | HIT-V, HAS-(E,U) [kN] | 6,1 | 9,6 | 14,0 | 23,5 | 37,3 | 51,2 | 62,6 | 74,6 |
| Shear V_{Rec} | HIT-V, HAS-(E,U) [kN] | 3,1 | 4,8 | 7,0 | 13,1 | 20,4 | 29,4 | 38,2 | 46,7 |

a) With overall partial safety factor for action $\gamma=3.0$. The partial safety factors for action depend on the type of loading and shall be taken from national regulations.

Materials

Mechanical properties

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|-----------------------------------|-------------------------------------------------|------|------|------|-------|-------|-------|--------|--------|
| Nominal tensile strength f_{uk} | HIT-V 5.8 HAS-(E,U) 5.8 [N/mm ²] | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| | HIT-V 8.8 HAS-(E,U) 8.8 [N/mm ²] | 800 | 800 | 800 | 800 | 800 | 800 | 800 | 800 |
| | HIT-V-R HAS-(E,U)R [N/mm ²] | 700 | 700 | 700 | 700 | 700 | 700 | 500 | 500 |
| | HIT-V-HCR HAS-(E,U)HCR [N/mm ²] | 800 | 800 | 800 | 800 | 800 | 700 | 700 | 700 |
| Yield strength f_{yk} | HIT-V 5.8 HAS-(E,U) 5.8 [N/mm ²] | 400 | 400 | 400 | 400 | 400 | 400 | 400 | 400 |
| | HIT-V 8.8 HAS-(E,U) 8.8 [N/mm ²] | 640 | 640 | 640 | 640 | 640 | 640 | 640 | 640 |
| | HIT-V-R HAS-(E,U)R [N/mm ²] | 450 | 450 | 450 | 450 | 450 | 450 | 210 | 210 |
| | HIT-V-HCR HAS-(E,U)HCR [N/mm ²] | 640 | 640 | 640 | 640 | 640 | 400 | 400 | 400 |
| Stressed cross-section A_s | HIT-V [mm ²] | 36,6 | 58,0 | 84,3 | 157 | 245 | 353 | 459 | 561 |
| | HAS-(E,U) [mm ²] | 32,8 | 52,3 | 76,2 | 144,0 | 225,0 | 324,0 | 427,0 | 519,0 |
| Moment of resistance W | HIT-V [mm ³] | 31,2 | 62,3 | 109 | 277 | 541 | 935 | 1387 | 1874 |
| | HAS-(E,U) [mm ³] | 27,0 | 54,1 | 93,8 | 244,0 | 474,0 | 809,0 | 1274,0 | 1706,0 |

Material quality for HIT-V and HAS-(E,U)

| Part | Material |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Zinc coated steel | |
| Threaded rod, HIT-V 5.8 (F) HAS-(E,U) 5.8 | Strength class 5.8; Elongation at fracture A5 > 8% ductile Electroplated zinc coated $\geq 5\mu\text{m}$; (F) hot dip galvanized $\geq 45\mu\text{m}$ |
| Threaded rod, HIT-V 8.8 (F) HAS-(E,U) 8.8 | Strength class 8.8; Elongation at fracture A5 > 12% ductile Electroplated zinc coated $\geq 5\mu\text{m}$; (F) hot dip galvanized $\geq 45\mu\text{m}$ |
| Washer | Electroplated zinc coated $\geq 5\mu\text{m}$, hot dip galvanized $\geq 45\mu\text{m}$ |
| Nut | Strength class of nut adapted to strength class of threaded rod. Electroplated zinc coated $\geq 5\mu\text{m}$, hot dip galvanized $\geq 45\mu\text{m}$ |
| Stainless Steel | |
| Threaded rod, HIT-V-R HAS-(E,U)-R | Strength class 70 for $\leq M24$ and strength class 50 for $> M24$; Elongation at fracture A5 > 8% ductile Stainless steel 1.4401; 1.4404; 1.4578; 1.4571; 1.4439; 1.4362 |
| Washer | Stainless steel 1.4401, 1.4404, 1.4578, 1.4571, 1.4439, 1.4362 EN 10088-1:2014 |
| Nut | Stainless steel 1.4401, 1.4404, 1.4578, 1.4571, 1.4439, 1.4362 EN 10088-1:2014 |
| High corrosion resistant steel | |
| Threaded rod, HIT-V-HCR HAS-(E,U)-HCR | Strength class 80 for $\leq M20$ and class 70 for $> M20$, Elongation at fracture A5 > 8% ductile High corrosion resistance steel 1.4529; 1.4565; |
| Washer | High corrosion resistant steel 1.4529, 1.4565 EN 10088-1:2014 |
| Nut | High corrosion resistant steel 1.4529, 1.4565 EN 10088-1:2014 |

Setting information

Installation temperature range:

+5°C to +40°C

Service temperature range

Hilti HIT-RE 100 injection mortar may be applied in the temperature ranges given below. An elevated base material temperature may lead to a reduction of the design bond resistance.

| Temperature range | Base material temperature | Max. long term base material temperature | Max. short term base material temperature |
|-----------------------|---------------------------|------------------------------------------|-------------------------------------------|
| Temperature range I | -40 °C to + 40 °C | + 24 °C | + 40 °C |
| Temperature range II | -40 °C to + 58 °C | + 35 °C | + 58 °C |
| Temperature range III | -40 °C to + 70 °C | + 43 °C | + 70 °C |

Max. short term base material temperature

Short term elevated base material temperatures are those that occur over brief intervals, e.g. as a result of diurnal cycling.

Max. long term base material temperature

Long term elevated base material temperatures are roughly constant over significant periods of time.

Working time and curing time

| Temperature of the base material | Max. working time in which rebar can be inserted and adjusted t_{work} | Min. curing time before rebar can be fully loaded t_{cure} |
|--------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------|
| $5\text{ °C} \leq T_{\text{BM}} < 10\text{ °C}$ | 2 h | 72 h |
| $10\text{ °C} \leq T_{\text{BM}} < 15\text{ °C}$ | 1,5 h | 48 h |
| $15\text{ °C} \leq T_{\text{BM}} < 20\text{ °C}$ | 30 min | 24 h |
| $20\text{ °C} \leq T_{\text{BM}} < 30\text{ °C}$ | 20 min | 12 h |
| $30\text{ °C} \leq T_{\text{BM}} < 40\text{ °C}$ | 12 min | 8 h |
| 40 °C | 12 min | 4 h |

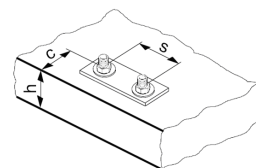
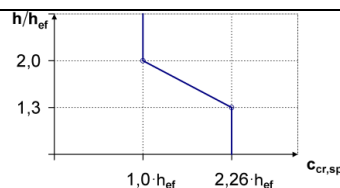
The curing time data are valid for dry base material only. In wet base material the curing times must be doubled.

Setting details

| Anchor size | | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|----------------------------------------------------------------|------------------|---------------------------------------------------|-----------|-----------|------------------|-----------|-----------|------------|------------|
| Nominal diameter of drill bit | d_0 [mm] | 10 | 12 | 14 | 18 | 22 | 28 | 30 | 35 |
| Diameter of element | d [mm] | 8 | 10 | 12 | 16 | 20 | 24 | 27 | 30 |
| Effective anchorage and drill hole depth | h_{ef} [mm] | 60 to 160 | 60 to 200 | 70 to 240 | 80 to 320 | 90 to 400 | 96 to 480 | 108 to 540 | 120 to 600 |
| Minimum base material thickness | h_{min} [mm] | $h_{ef} + 30 \geq 100$ mm | | | $h_{ef} + 2 d_0$ | | | | |
| Diameter of clearance hole in the fixture | d_f [mm] | 9 | 12 | 14 | 18 | 22 | 26 | 30 | 33 |
| Minimum spacing | s_{min} [mm] | 40 | 50 | 60 | 80 | 100 | 120 | 135 | 150 |
| Minimum edge distance | c_{min} [mm] | 40 | 50 | 60 | 80 | 100 | 120 | 135 | 150 |
| Critical spacing for splitting failure | $s_{cr,sp}$ [mm] | $2 C_{cr,sp}$ | | | | | | | |
| Critical edge distance for splitting failure ^{a)} | $C_{cr,sp}$ [mm] | $1,0 \cdot h_{ef}$ for $h / h_{ef} \geq 2,0$ | | | | | | | |
| | | $4,6 h_{ef} - 1,8 h$ for $2,0 > h / h_{ef} > 1,3$ | | | | | | | |
| | | $2,26 h_{ef}$ for $h / h_{ef} \leq 1,3$ | | | | | | | |
| Critical spacing for concrete cone failure | $s_{cr,N}$ [mm] | $2 C_{cr,N}$ | | | | | | | |
| Critical edge distance for concrete cone failure ^{b)} | $C_{cr,N}$ [mm] | $1,5 h_{ef}$ | | | | | | | |
| Torque moment ^{c)} | T_{max} [Nm] | 10 | 20 | 40 | 80 | 150 | 200 | 270 | 300 |

For spacing (edge distance) smaller than critical spacing (critical edge distance) the design loads have to be reduced.

- a) $h_{ef,min} \leq h_{ef} \leq h_{ef,max}$ (h_{ef} : embedment depth) h : base material thickness ($h \geq h_{min}$)
b) The critical edge distance for concrete cone failure depends on the embedment depth h_{ef} and the design bond resistance. The simplified formula given in this table is on the safe side.
c) This is the maximum recommended torque moment to avoid splitting failure during installation for anchors with minimum spacing and/or edge distance.



Installation equipment

| Anchor size | M8 | M10 | M12 | M16 | M20 | M24 | M27 | M30 |
|---------------|----------------------------------------------------------------------------------------|-----|-----|-----|-----|---------------|-----|-----|
| Rotary hammer | TE 2– TE 16 | | | | | TE 40 – TE 80 | | |
| Other tools | Compressed air gun or blow out pump Set of cleaning brushes, dispenser, piston plug | | | | | | | |

Drilling and cleaning parameters

| HIT-V HAS-(E,U) | Drill bit diameters d_0 [mm] | | Installation size [mm] | |
|--------------------|--------------------------------|------------------------|------------------------|--------------------|
| | Hammer drill (HD) | Hollow Drill Bit (HDB) | Brush HIT-RB | Piston plug HIT-SZ |
| | | | | |
| M8 | 10 | - | 10 | - |
| M10 | 12 | 12 | 12 | 12 |
| M12 | 14 | 14 | 14 | 14 |
| M16 | 18 | 18 | 18 | 18 |
| M20 | 22 | 22 | 22 | 22 |
| M24 | 28 | 28 | 28 | 28 |
| M27 | 30 | - | 30 | 30 |
| M30 | 35 | 35 | 35 | 35 |

Setting instructions

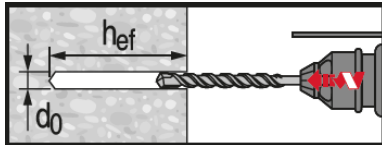
*For detailed information on installation see instruction for use given with the package of the product.



Safety regulations.

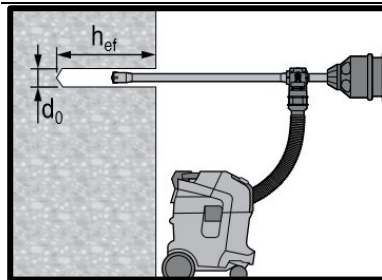
Review the Material Safety Data Sheet (MSDS) before use for proper and safe handling! Wear well-fitting protective goggles and protective gloves when working with Hilti HIT-RE 100.

Drilling



Hammer drilled hole

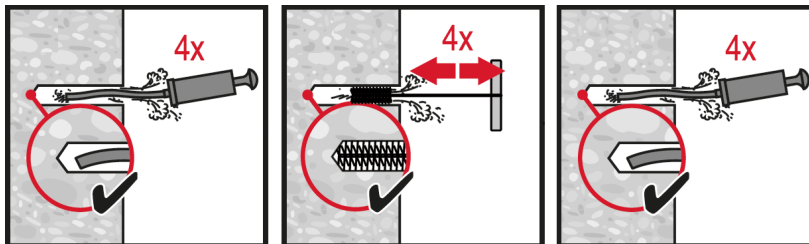
For dry and wet concrete.



Hammer drilled hole with Hollow Drilled Bit (HDB)

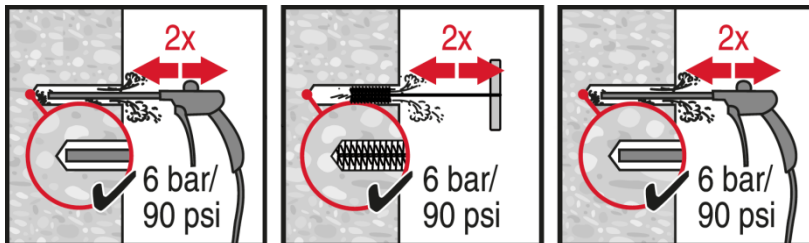
No cleaning required.

Cleaning



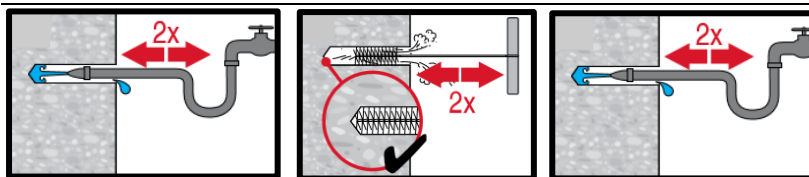
Manual cleaning (MC) Non-cracked concrete only

for drill diameters $d_0 \leq 20$ mm and drill hole depth $h_0 \leq 10 \cdot d$.



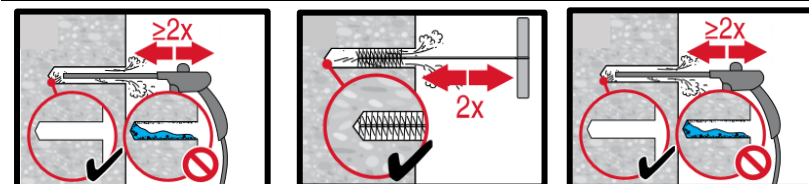
Compressed air cleaning (CAC)

for all drill hole diameters d_0 and drill hole depths $h_0 \leq 20 \cdot d$.

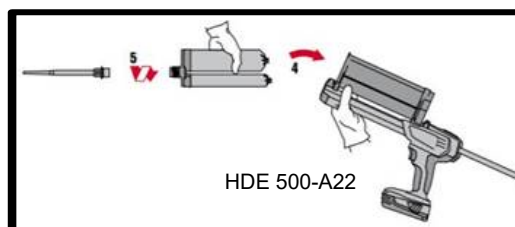


Compressed air cleaning (CAC) cleaning of flooded holes

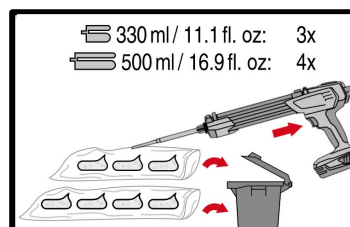
for all drill hole diameters d_0 and drill hole depths h_0 .



Injection system

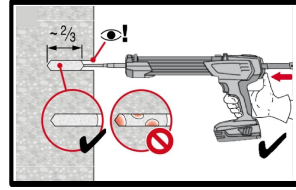
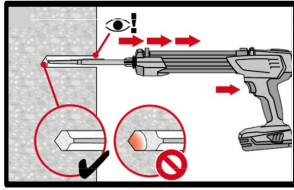


HDE 500-A22

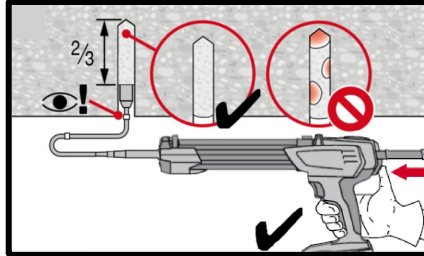
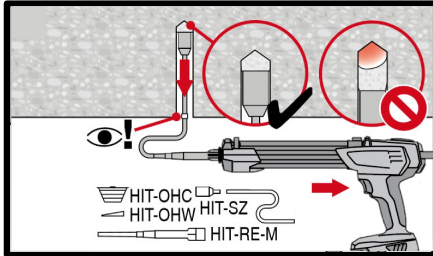


330 ml / 11.1 fl. oz: 3x
500 ml / 16.9 fl. oz: 4x

Injection system preparation.

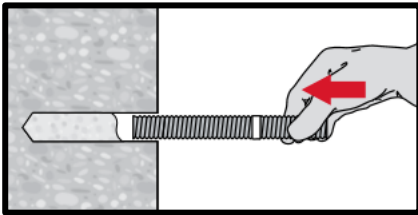


Injection method for drill hole depth
 $h_{ef} \leq 250 \text{ mm}$.

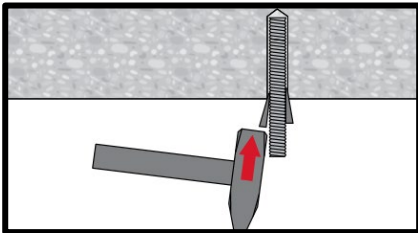


Injection method for overhead
application and/or installation with
embedment depth $h_{ef} > 250 \text{ mm}$.

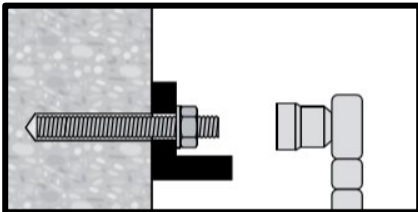
Setting the element



Setting element, observe working time
“ t_{work} ”,



Setting element for overhead
applications, observe working time “ t_{work} ”,



Loading the anchor: After required
curing time t_{cure} the anchor can be
loaded.

Attn. : To whom it may concern

Date : 1 April 2025
Ref. : 060/AC/SC/25

Subject : Country of Origin- Hilti HIT-RE100 Epoxy Anchor

Dear Sir / Madam,

Enclosed please find the information of Hilti HIT-RE100 Epoxy Anchor.

Brand Name : Hilti

Model Name : Hilti HIT-RE100 Epoxy Anchor

Manufacturer : Hilti Corporation

Address of Manufacturer : FL-9494, Principality of Liechtenstein.

Manufacturer Contact Person : Spencer Cheung

Supplier : Hilti (Hong Kong) Ltd

Address of Supplier : 701-704, 7/F, Tower A, Manulife Financial Centre,
223 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Supplier Contact Person : Spencer Cheung (+852 9732 1231)

Country of Origin : Germany

Should you have further questions, please do not hesitate to contact our Technical Representatives, Customer Service Hotline at 8228-8118, or email us at hksales@hilti.com.

Yours faithfully,

Spencer Cheung
Head of Product Leadership Strategy

Attn. : To whom it may concern

Date : 1 April 2025
Ref. : 056/AN/SC/25

Subject : Country of Origin - Anchor Rod Portfolio

Dear Sir / Madam,

Enclosed please find the information of Hilti anchor rod portfolio.

Brand Name : Hilti

Manufacturer : Hilti Corporation

Address of Manufacturer : FL-9494, Principality of Liechtenstein.

Supplier : Hilti (Hong Kong) Ltd

Address of Supplier : 701-704, 7/F, Tower A, Manulife Financial Centre,
223 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong

Country of Origin : *(Attached)*

Should you have further questions, please do not hesitate to contact our Technical Representatives, Customer Service Hotline at 8228-8118, or email us at hksales@hilti.com.

Yours faithfully,



Spencer Cheung
Head of Product Leadership Strategy

Hilti (Hong Kong) Ltd.
701-704 | Tower A | Manulife Financial Centre
223 Wai Yip Street | Kwun Tong
Kowloon | Hong Kong
P +852-8228 8118 | **F** +852-2954 1751
www.hilti.com.hk

| Item number | Model name | Country of Origin |
|-------------|-----------------------|-------------------|
| 2223936 | HAS-U 5.8 M6x75 | China |
| 2223704 | HAS-U 5.8 M6x105 | China |
| 2223852 | HAS-U 5.8 M8x80 | China |
| 2223853 | HAS-U 5.8 M8x110 | China |
| 2223854 | HAS-U 5.8 M8x150 | China |
| 2223705 | HAS-U 5.8 M10x95 | China |
| 2223706 | HAS-U 5.8 M10x115 | China |
| 2223707 | HAS-U 5.8 M10x130 | China |
| 2223709 | HAS-U 5.8 M10x170 | China |
| 2223820 | HAS-U 5.8 M10x190 | China |
| 2223821 | HAS-U 5.8 M12x110 | China |
| 2223822 | HAS-U 5.8 M12x120 | China |
| 2223823 | HAS-U 5.8 M12x160 | China |
| 2223825 | HAS-U 5.8 M12x180 | China |
| 2223826 | HAS-U 5.8 M12x200 | China |
| 2223827 | HAS-U 5.8 M12x220 | China |
| 2223867 | HAS-U 5.8 M12x260 | China |
| 2223868 | HAS-U 5.8 M12x300 | China |
| 2223828 | HAS-U 5.8 M16x150 | China |
| 2223829 | HAS-U 5.8 M16x165 | China |
| 2223830 | HAS-U 5.8 M16x190 | China |
| 2223869 | HAS-U 5.8 M16x220 | China |
| 2223832 | HAS-U 5.8 M16x260 | China |
| 2223870 | HAS-U 5.8 M16x300 | China |
| 2223871 | HAS-U 5.8 M16x350 | China |
| 2223872 | HAS-U 5.8 M16x500 | China |
| 2223873 | HAS-U 5.8 M20x180 | China |
| 2223874 | HAS-U 5.8 M20x240 | China |
| 2223876 | HAS-U 5.8 M20x260 | China |
| 2223877 | HAS-U 5.8 M20x300 | China |
| 2223878 | HAS-U 5.8 M20x350 | China |
| 2223879 | HAS-U 5.8 M20x400 | China |
| 2223880 | HAS-U 5.8 M20x480 | China |
| 2223881 | HAS-U 5.8 M24x300 | China |
| 2223882 | HAS-U 5.8 M24x450 | China |
| 2223856 | HAS-U 5.8 HDG M8x80 | China |
| 2223857 | HAS-U 5.8 HDG M8x110 | China |
| 2223858 | HAS-U 5.8 HDG M8x150 | China |
| 2223859 | HAS-U 5.8 HDG M10x95 | China |
| 2223860 | HAS-U 5.8 HDG M10x115 | China |
| 2223861 | HAS-U 5.8 HDG M10x130 | China |
| 2223862 | HAS-U 5.8 HDG M10x170 | China |
| 2223863 | HAS-U 5.8 HDG M10x190 | China |
| 2223937 | HAS-U 5.8 HDG M12x110 | China |
| 2223938 | HAS-U 5.8 HDG M12x120 | China |
| 2223939 | HAS-U 5.8 HDG M12x160 | China |
| 2223940 | HAS-U 5.8 HDG M12x180 | China |

| | | |
|---------|-----------------------|-------|
| 2223941 | HAS-U 5.8 HDG M12x200 | China |
| 2223942 | HAS-U 5.8 HDG M12x220 | China |
| 2223895 | HAS-U 5.8 HDG M12x260 | China |
| 2223896 | HAS-U 5.8 HDG M12x300 | China |
| 2223943 | HAS-U 5.8 HDG M16x150 | China |
| 2223944 | HAS-U 5.8 HDG M16x165 | China |
| 2223945 | HAS-U 5.8 HDG M16x190 | China |
| 2223946 | HAS-U 5.8 HDG M16x220 | China |
| 2223897 | HAS-U 5.8 HDG M16x260 | China |
| 2223898 | HAS-U 5.8 HDG M16x300 | China |
| 2223899 | HAS-U 5.8 HDG M16x350 | China |
| 2223900 | HAS-U 5.8 HDG M16x500 | China |
| 2223901 | HAS-U 5.8 HDG M20x180 | China |
| 2223902 | HAS-U 5.8 HDG M20x240 | China |
| 2223903 | HAS-U 5.8 HDG M20x260 | China |
| 2223904 | HAS-U 5.8 HDG M20x300 | China |
| 2223905 | HAS-U 5.8 HDG M20x350 | China |
| 2223906 | HAS-U 5.8 HDG M20x400 | China |
| 2223907 | HAS-U 5.8 HDG M20x480 | China |
| 2223908 | HAS-U 5.8 HDG M24x300 | China |
| 2223909 | HAS-U 5.8 HDG M24x450 | China |
| 2223855 | HAS-U 8.8 M8x150 | China |
| 2223833 | HAS-U 8.8 M10x190 | China |
| 2223834 | HAS-U 8.8 M12x220 | China |
| 2223883 | HAS-U 8.8 M12x300 | China |
| 2223835 | HAS-U 8.8 M16x190 | China |
| 2223884 | HAS-U 8.8 M16x300 | China |
| 2223885 | HAS-U 8.8 M16x380 | China |
| 2223886 | HAS-U 8.8 M20x180 | China |
| 2223887 | HAS-U 8.8 M20x260 | China |
| 2223888 | HAS-U 8.8 M20x400 | China |
| 2223889 | HAS-U 8.8 M24x300 | China |
| 2223890 | HAS-U 8.8 M27x340 | China |
| 2223891 | HAS-U 8.8 M30x380 | China |
| 2223892 | HAS-U 8.8 M33x420 | China |
| 2223893 | HAS-U 8.8 M36x460 | China |
| 2223894 | HAS-U 8.8 M39x510 | China |
| 2223947 | HAS-U 8.8 HDG M8x150 | China |
| 2223948 | HAS-U 8.8 HDG M10x190 | China |
| 2223949 | HAS-U 8.8 HDG M12x220 | China |
| 2223910 | HAS-U 8.8 HDG M12x300 | China |
| 2223703 | HAS-U 8.8 HDG M16x190 | China |
| 2223911 | HAS-U 8.8 HDG M16x300 | China |
| 2223912 | HAS-U 8.8 HDG M16x380 | China |
| 2223913 | HAS-U 8.8 HDG M20x180 | China |
| 2223914 | HAS-U 8.8 HDG M20x260 | China |
| 2223915 | HAS-U 8.8 HDG M20x400 | China |
| 2223916 | HAS-U 8.8 HDG M24x300 | China |
| 2223917 | HAS-U 8.8 HDG M27x340 | China |

| | | |
|---------|-----------------------|---------------|
| 2223918 | HAS-U 8.8 HDG M30x380 | China |
| 2223864 | HAS-U A4 M8x80 | China |
| 2223865 | HAS-U A4 M8x110 | China |
| 2223866 | HAS-U A4 M8x150 | China |
| 2223836 | HAS-U A4 M10x95 | China |
| 2223837 | HAS-U A4 M10x115 | China |
| 2223838 | HAS-U A4 M10x130 | China |
| 2223839 | HAS-U A4 M10x170 | China |
| 2223840 | HAS-U A4 M10x190 | China |
| 2223841 | HAS-U A4 M10x220 | China |
| 2223842 | HAS-U A4 M12x110 | China |
| 2223843 | HAS-U A4 M12x120 | China |
| 2223844 | HAS-U A4 M12x160 | China |
| 2223845 | HAS-U A4 M12x180 | China |
| 2223846 | HAS-U A4 M12x200 | China |
| 2223847 | HAS-U A4 M12x220 | China |
| 2223919 | HAS-U A4 M12x260 | China |
| 2223920 | HAS-U A4 M12x300 | China |
| 2223848 | HAS-U A4 M16x150 | China |
| 2223849 | HAS-U A4 M16x165 | China |
| 2223850 | HAS-U A4 M16x190 | China |
| 2223851 | HAS-U A4 M16x220 | China |
| 2223921 | HAS-U A4 M16x260 | Denmark |
| 2223922 | HAS-U A4 M16x300 | China |
| 2223923 | HAS-U A4 M16x350 | China |
| 2223924 | HAS-U A4 M16x380 | China |
| 2223925 | HAS-U A4 M20x180 | China |
| 2223926 | HAS-U A4 M20x240 | China |
| 2223927 | HAS-U A4 M20x260 | China |
| 2223928 | HAS-U A4 M20x300 | China |
| 2223929 | HAS-U A4 M20x350 | China |
| 2223930 | HAS-U A4 M20x400 | China |
| 2223931 | HAS-U A4 M20x480 | China |
| 2223932 | HAS-U A4 M24x300 | China |
| 2223933 | HAS-U A4 M24x450 | China |
| 2223934 | HAS-U A4 M27x340 | China |
| 2223935 | HAS-U A4 M30x380 | China |
| 258015 | HIS-N M8x90 | China |
| 258016 | HIS-N M10x110 | China |
| 258017 | HIS-N M12x125 | China |
| 258018 | HIS-N M16x170 | China |
| 258019 | HIS-N M20x205 | China |
| 258024 | HIS-RN M8x90 A4 | China |
| 258025 | HIS-RN M10x110 A4 | China |
| 258026 | HIS-RN M12x125 A4 | China |
| 258027 | HIS-RN M16x170 A4 | China |
| 258028 | HIS-RN M20x205 A4 | China |
| 2018364 | HIT-Z M8x80 | Liechtenstein |
| 2018365 | HIT-Z M8x100 | Liechtenstein |

| | | |
|---------|-----------------|---------------|
| 2018366 | HIT-Z M8x120 | Liechtenstein |
| 2018367 | HIT-Z M10x95 | Liechtenstein |
| 2018369 | HIT-Z M10x135 | Liechtenstein |
| 2018410 | HIT-Z M10x160 | Liechtenstein |
| 2018411 | HIT-Z M12x105 | Liechtenstein |
| 2018412 | HIT-Z M12x140 | Liechtenstein |
| 2018413 | HIT-Z M12x155 | Liechtenstein |
| 2018415 | HIT-Z M12x196 | Liechtenstein |
| 2018416 | HIT-Z M16x155 | Liechtenstein |
| 2018418 | HIT-Z M16x205 | Liechtenstein |
| 2018419 | HIT-Z M16x240 | Liechtenstein |
| 2018420 | HIT-Z M20x215 | Liechtenstein |
| 2018421 | HIT-Z M20x250 | Liechtenstein |
| 2018422 | HIT-Z-R M8x80 | Liechtenstein |
| 2018423 | HIT-Z-R M8x100 | Liechtenstein |
| 2018424 | HIT-Z-R M8x120 | Liechtenstein |
| 2018425 | HIT-Z-R M10x95 | Liechtenstein |
| 2018426 | HIT-Z-R M10x115 | Liechtenstein |
| 2018427 | HIT-Z-R M10x135 | Liechtenstein |
| 2018428 | HIT-Z-R M10x160 | Liechtenstein |
| 2018429 | HIT-Z-R M12x105 | Liechtenstein |
| 2018430 | HIT-Z-R M12x140 | Liechtenstein |
| 2018431 | HIT-Z-R M12x155 | Liechtenstein |
| 2018433 | HIT-Z-R M12x196 | Liechtenstein |
| 2018434 | HIT-Z-R M16x155 | Liechtenstein |
| 2018435 | HIT-Z-R M16x175 | Liechtenstein |
| 2018436 | HIT-Z-R M16x205 | Liechtenstein |
| 2018437 | HIT-Z-R M16x240 | Liechtenstein |
| 2018438 | HIT-Z-R M20x215 | Liechtenstein |
| 2018439 | HIT-Z-R M20x250 | Liechtenstein |

Date : 30 April 2019
 Ref. : 038/AC/KC/19

To whom it may concern,

Subject: RE: Hilti HIT-RE 100 – New product replacement of HIT-RE 500

With the continuous upgrade in Hilti chemical anchor portfolio, we are pleased to introduce the new epoxy mortar **Hilti HIT-RE 100 injection mortar system** to replace the existing HIT-RE 500. **HIT-RE 100** will be officially phased in from **July 2019**, meanwhile HIT-RE 500 will be phased out until the stock lasts the end of 2019.

| Phase out item | | Phase in item | |
|----------------|------------------|---------------|------------------|
| Item no. | Description | Item no. | Description |
| 426672 | HIT-RE 500/500/1 | 2123386 | HIT-RE 100/500/1 |
| 426675 | HIT-RE 500/330/1 | | |

We thank you for the confidence in Hilti quality and we do our utmost to provide our customers with quality products and service. Below are the highlighted product features of HIT-RE 100.

- **Same design bond stress** as RE 500 in rebar application, as per ETA-15/0883
- **Same curing and working time** as RE 500
- **Same installation procedures and accessories** as RE 500
- For design under static and quasi-static action according to EOTA TR 029 and CEN/TS 1992-4 "Design of fastenings for use in concrete"
- Detailed technical data can be referred to Hilti RE 100 technical data

Should you need further information or support, please feel free to contact our customer service hotline 8228 8118.

Yours sincerely,
 For and on behalf of
Hilti (Hong Kong) LTD.



Kelvin Chan
 Product Manager

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www.hilti.com.hk

HIT-RE 100

Safety information for 2-Component-products

Issue date: 11/05/2020

Revision date: 11/05/2020

Supersedes: 11/07/2018

Version: 3.0

SECTION 1: Kit identification

1.1 Product identifier

Product name

HIT-RE 100



Product code

BU Anchor

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

Hilti (Hong Kong) Ltd.
701-704, 7/F, Tower A, Manulife Financial Centre
223 Wai Yip Street, Kwun Tong
Kowloon - Hong Kong
T +852 27734 700
hksales@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 (Rev. 4, 2011)

| | |
|---------------------|------|
| 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 (Rev. 4, 2011)

Hazard pictograms (GHS UN)



GHS05



GHS07



GHS08



GHS09

Signal word (GHS UN)

Danger

Hazardous ingredients

Epoxy resin, Amines

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.
H360F - May damage fertility.

HIT-RE 100

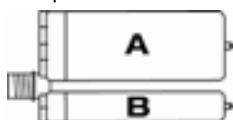
Safety information for 2-Component-products

Precautionary statements (GHS UN)

H411 - Toxic to aquatic life with long lasting effects.
P280 - Wear eye protection, protective clothing, protective gloves.
P262 - Do not get in eyes, on skin, or on clothing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P302+P352 - IF ON SKIN: Wash with plenty of water.

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 | 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 | Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412 |

SECTION 4: General advice

General advice

For professional users only

SECTION 5: Safe handling advice

General measures

Spilled material may present a slipping hazard

Environmental precautions

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

Storage conditions

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

Technical measures

Comply with applicable regulations

Precautions for safe handling

Wear personal protective equipment
Avoid contact with skin and eyes
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work
Avoid contact during pregnancy/while nursing

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

HIT-RE 100

Safety information for 2-Component-products

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 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

HIT-RE 100, B

Safety Data Sheet

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

Issue date: 11/05/2020

Version: 2.0

Revision date: 11/05/2020

Supersedes: 11/07/2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|--------------|---------------|
| Product form | Mixture |
| Product name | HIT-RE 100, B |
| UN-No. (ADR) | 3259 |
| Product code | BU Anchor |

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

| | |
|------------------------------|----------------------------------------------------------------------------------------------------|
| Use of the substance/mixture | For professional use only Composite mortar component for fasteners in the construction industry |
|------------------------------|----------------------------------------------------------------------------------------------------|

1.3. Details of the supplier of the safety data sheet

| Supplier | Department issuing data specification sheet |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong Kowloon - Hong Kong T +852 27734 700 hksales@hilti.com | Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906876 anchor.hse@hilti.com |

1.4. Emergency telephone number

| | |
|------------------|-------------------------------------------------------------------------------------------------------------------------|
| Emergency number | Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +852 27734 700 |
|------------------|-------------------------------------------------------------------------------------------------------------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| | |
|--------------------------------------------|------|
| Acute Tox. 4 (Oral) | H302 |
| Skin Corr. 1B | H314 |
| Skin Sens. 1 | H317 |
| Aquatic Acute 3 | H402 |
| Aquatic Chronic 3 | H412 |
| Full text of H statements : see section 16 | |

2.2. Label elements

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

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Danger

Hazardous ingredients

Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene; resorcinol; m-Xylylenediamine

Hazard statements (GHS UN)

H314 - Causes severe skin burns and eye damage.
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

HIT-RE 100, B

Safety Data Sheet

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

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

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 | Acute toxicity (oral), Category 4, H302 Acute toxicity (inhalation:dust,mist) Category 4, H332 Skin corrosion/irritation, Category 1B, H314 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, category 1B, H317 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402 Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |
| 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 |
| 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 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.

HIT-RE 100, B

Safety Data Sheet

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

| | |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| First-aid measures after eye contact | Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist. |
| First-aid measures after ingestion | Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------------------------------------------|------------------------------------------|
| 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. |
| Potential adverse human health effects and symptoms | No additional information available. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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

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. |
|------------------|-------------------------------------------------|

6.1.1. For non-emergency personnel

| | |
|----------------------|---------------------------------|
| Emergency procedures | Evacuate unnecessary personnel. |
|----------------------|---------------------------------|

6.1.2. For emergency responders

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| For containment | Collect spillage. |
| 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. |

HIT-RE 100, B

Safety Data Sheet

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

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. |
| 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 | 5 - 25 °C |
| Heat and ignition sources | Keep away from heat and direct sunlight. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

8.2. Appropriate engineering controls

| | |
|----------------------------------|-----------------------------------------------|
| Appropriate engineering controls | Ensure good ventilation of the work station. |
| 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. |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|-------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | > 0,4 | | EN 374 |

| | |
|----------------|---------------------------------------------------|
| Eye protection | Wear security glasses which protect from splashes |
|----------------|---------------------------------------------------|

| Type | Use | Characteristics | Standard |
|----------------|---------|-----------------|----------------|
| Safety glasses | Droplet | clear | EN 166, EN 170 |

HIT-RE 100, B

Safety Data Sheet

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

Skin and body protection

Wear suitable protective clothing



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------------------------|------------------------------------------|
| Physical state | Solid |
| Appearance | Thixotropic paste. |
| Colour | Red-brown to black. |
| Odour | Amine-like. |
| Odour threshold | No data available |
| pH | 11.5 |
| Relative evaporation rate (butylacetate=1) | 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. |
| Vapour pressure | No data available |
| Relative vapour density at 20 °C | No data available |
| Relative density | No data available |
| Density | 1.41 g/cm ³ DIN EN ISO 1183-3 |
| Solubility | insoluble in water. |
| Log Pow | No data available |
| Viscosity, kinematic | No data available |
| Viscosity, dynamic | 43 - 57 Pa·s HN-0333 |
| Explosive properties | No data available |
| Oxidising properties | No data available |
| Explosive limits | No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

HIT-RE 100, B

Safety Data Sheet

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

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide. Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|-----------------------|
| Acute toxicity (oral) | Harmful if swallowed. |
| Acute toxicity (dermal) | Not classified |
| Acute toxicity (inhalation) | Not classified |

| | |
|--------------------------------------------------------------------------------------------------------------|---------------------------|
| ATE CLP (oral) | 1706.776 mg/kg bodyweight |
| Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) | |
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| resorcinol (108-46-3) | |
| LD50 oral | 301 mg/kg |
| m-Xylenediamine (1477-55-0) | |
| LD50 oral rat | 1090 mg/kg |
| LD50 oral | 660 mg/kg |
| LD50 dermal rat | > 3100 mg/kg |
| LD50 dermal | > 3100 mg/kg |
| LC50 inhalation rat (Dust/Mist - mg/l/4h) | 1.34 mg/l/4h |

| | |
|-----------------------------------|------------------------------------------------------|
| 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 |
| Carcinogenicity | Not classified |
| Reproductive toxicity | Not classified |
| STOT-single exposure | Not classified |
| STOT-repeated exposure | Not classified |
| Aspiration hazard | Not classified |

| | |
|-----------------------------------------------------|--------------------------------------|
| Potential adverse human health effects and symptoms | No additional information available. |
|-----------------------------------------------------|--------------------------------------|

SECTION 12: Ecological information

12.1. Toxicity

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

HIT-RE 100, B

Safety Data Sheet

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

Hazardous to the aquatic environment, short-term (acute)

Classification procedure (Hazardous to the aquatic environment, short-term (acute))

Hazardous to the aquatic environment, long-term (chronic)

Classification procedure (Hazardous to the aquatic environment, long-term (chronic))

Harmful to aquatic life.

Expert judgment

Harmful to aquatic life with long lasting effects.

Expert judgment

| Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) | |
|-------------------------------------------------------------------------------------------------------|--------------|
| LC50 fish 1 | >= 50 mg/l |
| LC50 other aquatic organisms 1 | >= 31.8 mg/l |
| EC50 Daphnia 1 | 2.4 mg/l |
| NOEC chronic algae | 6.25 mg/l |
| resorcinol (108-46-3) | |
| EC50 Daphnia 1 | 1.28 mg/l |
| m-Xylylenediamine (1477-55-0) | |
| LC50 fish 1 | 75 mg/l |
| LC50 other aquatic organisms 1 | 20.3 ppb |
| EC50 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 |

12.2. Persistence and degradability

| HIT-RE 100, B | |
|-------------------------------|---------------------------------------------------------|
| Persistence and degradability | May cause long-term adverse effects in the environment. |

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 |
| Log Pow | 5.14 |

12.4. Mobility in soil

| Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) | |
|-------------------------------------------------------------------------------------------------------|-----------------------------------|
| Log Pow | See section 12.1 on ecotoxicology |

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. Waste treatment 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. |





HIT-RE 100, B

Safety Data Sheet

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

SECTION 14: Transport information

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

| ADR | IMDG | IATA | RID |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 14.1. UN number | | | |
| 3259 | 3259 | 3259 | 3259 |
| 14.2. UN proper shipping name | | | |
| AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine) | AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine) | Amines, solid, corrosive, n.o.s. (m-Xylylenediamine) | AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine) |
| Transport document description | | | |
| UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine), 8, II, (E) | UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine), 8, II | UN 3259 Amines, solid, corrosive, n.o.s. (m-Xylylenediamine), 8, II | UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (m-Xylylenediamine), 8, II |
| 14.3. Transport hazard class(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 | |



| | |
|-------------------------------|---|
| 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 |

HIT-RE 100, B

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Stowage and segregation (IMDG) Separated from' acids.
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
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. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

SECTION 16: Other information

SDS Major/Minor None
Issue date 11/05/2020
Revision date 11/05/2020
Supersedes 11/07/2018

Indication of changes:

| Section | Changed item | Change | Comments |
|---------|----------------------------|----------|----------|
| 2.1 | Classification (GHS UN) | Modified | |
| 2.2 | Hazard statements (GHS UN) | Modified | |
| 16 | Additional information | Added | |

HIT-RE 100, B

Safety Data Sheet

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

Abbreviations and acronyms

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

HIT-RE 100, A

Safety Data Sheet

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

Issue date: 11/05/2020

Version: 3.0

Revision date: 11/05/2020

Supersedes: 11/07/2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

| | |
|--------------|---------------|
| Product form | Mixture |
| Product name | HIT-RE 100, A |
| UN-No. (ADR) | 1759 |
| Product code | BU Anchor |

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

| | |
|------------------------------|----------------------------------------------------------------------------------------------------|
| Use of the substance/mixture | For professional use only Composite mortar component for fasteners in the construction industry |
|------------------------------|----------------------------------------------------------------------------------------------------|

1.3. Details of the supplier of the safety data sheet

| Supplier | Department issuing data specification sheet |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hilti (Hong Kong) Ltd. 701-704, 7/F, Tower A, Manulife Financial Centre 223 Wai Yip Street, Kwun Tong Kowloon - Hong Kong T +852 27734 700 hksales@hilti.com | Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906876 anchor.hse@hilti.com |

1.4. Emergency telephone number

| | |
|------------------|-------------------------------------------------------------------------------------------------------------------------|
| Emergency number | Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +852 27734 700 |
|------------------|-------------------------------------------------------------------------------------------------------------------------|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| | |
|-------------------|------|
| Skin Corr. 1C | H314 |
| Skin Sens. 1 | H317 |
| Muta. 2 | H341 |
| Repr. 1B | H360 |
| Aquatic Acute 2 | H401 |
| Aquatic Chronic 2 | H411 |

Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (GHS UN)



GHS05

GHS07

GHS08

GHS09

Signal word (GHS UN)

Danger

Hazardous ingredients

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol ;
Reaction products of hexane-1,6-diol with 2-(chloromethyl); 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane; trimethylolpropane triglycidylether

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..

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

Precautionary statements (GHS UN)

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.
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

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 |
| 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 |
| trimethylolpropane triglycidylether | (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

HIT-RE 100, A

Safety Data Sheet

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

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. Allow affected person to breathe fresh air. Allow the victim to rest. |
| First-aid measures after skin contact | Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get immediate medical advice/attention. |
| First-aid measures after eye contact | Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion | Rinse mouth. Get medical advice/attention. Do not induce vomiting. Obtain emergency medical attention. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------------------------------------------|--------------------------------------|
| 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. |
| Potential adverse human health effects and symptoms | No additional information available. |

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

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. |
|------------------|-------------------------------------------------|

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. |

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Safety Data Sheet

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

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. |

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. |
| Hygiene measures | Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|------------------------------------------|
| Storage conditions | Protect from sunlight. |
| Incompatible products | Strong bases. Strong acids. |
| Incompatible materials | Sources of ignition. Direct sunlight. |
| Storage temperature | 5 - 25 °C |
| Heat and ignition sources | Keep away from heat and direct sunlight. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

8.2. Appropriate engineering controls

| | |
|----------------------------------|-----------------------------------------------|
| Appropriate engineering controls | Ensure good ventilation of the work station. |
| 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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according to the United Nations GHS (Rev. 4, 2011)

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.

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|-------------------|----------------|-------------|----------|
| Disposable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | > 0,4 | | EN 374 |

Eye protection

Wear security glasses which protect from splashes

| Type | Use | Characteristics | Standard |
|----------------|---------|-----------------|----------------|
| Safety glasses | Droplet | clear | EN 166, EN 170 |

Skin and body protection

Wear suitable protective clothing



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--------------------------------------------|-----------------------------|
| Physical state | Solid |
| Appearance | Thixotropic paste. |
| Colour | Light grey. |
| Odour | characteristic. |
| Odour threshold | No data available |
| pH | 6.2 |
| Relative evaporation rate (butylacetate=1) | 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. |
| Vapour pressure | No data available |
| Relative vapour density at 20 °C | No data available |
| Relative density | No data available |
| Density | 1.46 g/ml DIN EN ISO 1183-3 |
| Solubility | insoluble in water. |
| Log Pow | No data available |
| Viscosity, kinematic | No data available |

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

| | |
|----------------------|---------------------------|
| Viscosity, dynamic | 36 - 53 Pa·s HN-0333 |
| Explosive properties | Product is not explosive. |
| Oxidising properties | No data available |
| Explosive limits | No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates : fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|----------------|
| Acute toxicity (oral) | Not classified |
| Acute toxicity (dermal) | Not classified |
| Acute toxicity (inhalation) | Not classified |

| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) | |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| LD50 dermal rat | > 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity) |
| 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) |
| Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9) | |
| LD50 oral rat | 3010 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

| | |
|-----------------------------------|-----------------------------------------------------|
| Skin corrosion/irritation | Causes severe skin burns and eye damage. pH: 6.2 |
| Serious eye damage/irritation | Serious eye damage, category 1, implicit pH: 6.2 |
| Respiratory or skin sensitisation | May cause an allergic skin reaction. |
| Germ cell mutagenicity | Suspected of causing genetic defects. |
| Carcinogenicity | Not classified |

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| | |
|-----------------------------------------------------|--------------------------------------|
| Reproductive toxicity | May damage fertility.. |
| STOT-single exposure | Not classified |
| STOT-repeated exposure | Not classified |
| Aspiration hazard | Not classified |
| Potential adverse human health effects and symptoms | 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 (acute) | Toxic to aquatic life. |
| Classification procedure (Hazardous to the aquatic environment, short-term (acute)) | Calculation method |
| Hazardous to the aquatic environment, long-term (chronic) | Toxic to aquatic life with long lasting effects. |
| Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) | Calculation method |

| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) | |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| LC50 fish 1 | 2.3 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Nominal concentration) |
| EC50 Daphnia 1 | 2 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) |
| LC50 fish 2 | 2.3 mg/l (96 h; Oncorhynchus mykiss; Nominal concentration) |
| 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 Daphnia 1 | 47 mg/l |
| NOEC (acute) | 18 mg/l |

12.2. Persistence and degradability

| HIT-RE 100, A | |
|---------------------------------------------------------------------------------|---------------------------------------------------------|
| Persistence and degradability | May cause long-term adverse effects in the environment. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) | |
| Persistence and degradability | Not readily biodegradable in water. |

12.3. Bioaccumulative potential

| HIT-RE 100, A | |
|---------------------------------------------------------------------------------|------------------------------------------------|
| Bioaccumulative potential | Not established. |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) | |
| BCF other aquatic organisms 1 | 31 (Estimated value, Fresh weight) |
| Log Pow | 3 (Estimated value, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

12.4. Mobility in soil

| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) | |
|---------------------------------------------------------------------------------|---------------------------------------|
| Surface tension | 59 mN/m (20 °C, 0.09 g/l) |
| Log Pow | See section 12.1 on ecotoxicology |
| Log Koc | See section 12.1 on ecotoxicology |
| Ecology - soil | Low potential for adsorption in soil. |

12.5. Other adverse effects

HIT-RE 100, A

Safety Data Sheet

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

| | |
|-----------------------|-------------------------------------|
| Ozone | Not classified |
| Other adverse effects | No additional information available |
| Other information | Avoid release to the environment. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

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

| ADR | IMDG | IATA | RID |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 14.1. UN number | | | |
| 1759 | 1759 | 1759 | 1759 |
| 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/ENVIRONMENTALLY 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 |
| | | | |
| 14.4. Packing group | | | |
| III | III | III | III |
| 14.5. Environmental hazards | | | |
| Dangerous for the environment : Yes | Dangerous for the environment : Yes Marine pollutant : Yes | Dangerous for the environment : Yes | Dangerous for the environment : Yes |
| No supplementary information available | | | |

14.6. Special precautions for user

- Overland transport

Classification code (ADR) C10

HIT-RE 100, A

Safety Data Sheet

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

| | |
|--------------------------------|-------------------------|
| Special provisions (ADR) | 274 |
| Limited quantities (ADR) | 5kg |
| Packing instructions (ADR) | P002, IBC08, LP02, R001 |
| Mixed packing provisions (ADR) | MP10 |
| Transport category (ADR) | 3 |
| Orange plates | |



| | |
|-------------------------------|---|
| Tunnel restriction code (ADR) | E |
|-------------------------------|---|

- Transport by sea

| | |
|-----------------------------|------------|
| Special provisions (IMDG) | 223, 274 |
| Packing instructions (IMDG) | P002, LP02 |
| EmS-No. (Fire) | F-A |
| EmS-No. (Spillage) | S-B |
| Stowage category (IMDG) | A |

- Air transport

| | |
|---------------------------------|----------|
| PCA packing instructions (IATA) | 860 |
| PCA max net quantity (IATA) | 25kg |
| CAO packing instructions (IATA) | 864 |
| Special provisions (IATA) | A3, A803 |

- Rail transport

| | |
|----------------------------|-------------------------|
| Special provisions (RID) | 274 |
| Packing instructions (RID) | P002, IBC08, LP02, R001 |
| 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. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

SECTION 16: Other information

| | |
|-----------------|------------|
| SDS Major/Minor | None |
| Issue date | 11/05/2020 |
| Revision date | 11/05/2020 |
| Supersedes | 11/07/2018 |

Indication of changes:

| Section | Changed item | Change | Comments |
|---------|----------------------------|----------|----------|
| 2.1 | Classification (GHS UN) | Added | |
| 2.2 | Hazard statements (GHS UN) | Added | |
| 9 | pH | Added | |
| 14 | Transport information | Modified | |
| 16 | Additional information | Added | |

HIT-RE 100, A

Safety Data Sheet

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

Abbreviations and acronyms

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

Full text of H-statements:

| | |
|------|----------------------------------------------------|
| H303 | 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. |
| 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.



HIT-RE100 Epoxy Anchor
(Anchorage)