

# HIT-RE 500 V3

## Safety information for 2-Component-products

Issue date: 13/05/2020

Revision date: 13/05/2020

Supersedes: 26/02/2019

Version: 2.3

### SECTION 1: Kit identification

#### 1.1 Product identifier

Product name

HIT-RE 500 V3



Product code

BU Anchor

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

Hilti Bahrain W.L.L  
Warehouse No. 23 & 25, Gate 285, Road 4306  
Area 343, Mina Salman  
P.O. Box 11401  
Manama  
T +973 17811675  
[hiltibahrain@hilti.com](mailto:hiltibahrain@hilti.com) - <https://www.hilti-me.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. 5 (Oral) | H303 |
| Skin Corr. 1B       | H314 |
| Skin Sens. 1        | H317 |
| Muta. 2             | H341 |
| Repr. 1B            | H360 |
| STOT SE 3           | H335 |
| 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.  
H335 - May cause respiratory irritation.  
H341 - Suspected of causing genetic defects.  
H360 - May damage fertility or the unborn child.

# HIT-RE 500 V3

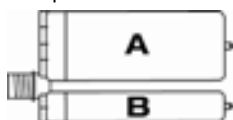
## Safety information for 2-Component-products

### 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 500 V3, B |                     | 1        | pcs  | Acute Tox. 5 (Oral), H303<br>Skin Corr. 1B, H314<br>Skin Sens. 1, H317<br>STOT SE 3, H335<br>Aquatic Acute 3, H402<br>Aquatic Chronic 3, H412 |
| HIT-RE 500 V3, A |                     | 1        | pcs  | Skin Corr. 1C, H314<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Repr. 1B, H360<br>Aquatic Acute 2, H401<br>Aquatic Chronic 2, H411              |

## 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

# HIT-RE 500 V3

## Safety information for 2-Component-products

---

Strong acids

### SECTION 6: First aid measures

|                                       |  |
|---------------------------------------|--|
| First-aid measures after eye contact  | Get immediate medical advice/attention.<br>Immediately rinse with water for a prolonged period while holding the eyelids wide open<br>Remove contact lenses, if present and easy to do. Continue rinsing.<br>Consult an eye specialist |
| First-aid measures after ingestion    | Do not induce vomiting<br>Rinse mouth<br>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/...<br>Take off immediately all contaminated clothing.<br>Wash contaminated clothing before reuse.<br>If skin irritation or rash occurs: Get immediate medical advice/attention.                             |
| First-aid measures general            | Never give anything by mouth to an unconscious person<br>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<br>Exercise caution when fighting any chemical fire<br>Prevent fire fighting water from entering the environment |
| Protection during firefighting                   | Self-contained breathing apparatus<br>Do not enter fire area without proper protective equipment, including respiratory protection                                     |
| Hazardous decomposition products in case of fire | Thermal decomposition generates :<br>Carbon dioxide<br>Carbon monoxide   |

### SECTION 8: Other information

No data available

# HIT-RE 500 V3, B

## Safety Data Sheet

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

Issue date: 13/05/2020

Version: 1.6

Revision date: 13/05/2020

Supersedes: 25/02/2019

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

#### 1.1. Product identifier

|              |                  |
|--------------|------------------|
| Product form | Mixture          |
| Product name | HIT-RE 500 V3, 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 | Composite mortar component for fasteners in the construction industry |
|------------------------------|---|

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Hilti Bahrain W.L.L  
Warehouse No. 23 & 25, Gate 285, Road 4306  
Area 343, Mina Salman  
P.O. Box 11401  
Manama  
T +973 17811675  
[hiltibahrain@hilti.com](mailto:hiltibahrain@hilti.com) - <https://www.hilti-me.com/>

##### Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH  
Hiltistraße 6  
86916 Kaufering - Deutschland  
T +49 8191 906876  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### 1.4. Emergency telephone number

|                  |   |
|------------------|---|
| Emergency number | Schweizerisches Toxikologisches Informationszentrum – 24h Service<br>+41 44 251 51 51 (international) |
|------------------|---|

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

|                     |      |
|---------------------|------|
| Acute Tox. 5 (Oral) | H303 |
| Skin Corr. 1B       | H314 |
| Skin Sens. 1        | H317 |
| STOT SE 3           | H335 |
| 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)



GHS05

GHS07

Signal word (GHS UN)

Danger

Hazardous ingredients

2-methyl-1,5-pentanediamine; Phenol, styrenated; m-Xylylenediamine; 3-Aminopropyltriethoxysilan; 2,4,6-tris(dimethylaminomethyl)phenol

Hazard statements (GHS UN)

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

# HIT-RE 500 V3, B

## Safety Data Sheet

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

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-methyl-1,5-pentanediamine           | (CAS-No.) 15520-10-2 | 25 - 35 | Flammable liquids, Category 4, H227<br>Acute toxicity (oral), Category 4, H302<br>Acute toxicity (dermal), Category 4, H312<br>Acute toxicity (inhalation:dust,mist) Category 4, H332<br>Skin corrosion/irritation, Category 1A, H314<br>Serious eye damage/eye irritation, Category 1, H318<br>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation, H335      |
| Phenol, styrenated                    | (CAS-No.) 61788-44-1 | 5 - 10  | Skin corrosion/irritation, Category 2, H315<br>Skin sensitisation, Category 1, H317<br>Hazardous to the aquatic environment — Acute Hazard, Category 2, H401<br>Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411   |
| m-Xylylenediamine                     | (CAS-No.) 1477-55-0  | 5 - <8  | Acute toxicity (oral), Category 4, H302<br>Acute toxicity (inhalation:dust,mist) Category 4, H332<br>Skin corrosion/irritation, Category 1B, H314<br>Serious eye damage/eye irritation, Category 1, H318<br>Skin sensitisation, category 1B, H317<br>Hazardous to the aquatic environment — Acute Hazard, Category 3, H402<br>Hazardous to the aquatic environment — Chronic Hazard, Category 3, H412 |
| 2,4,6-tris(dimethylaminomethyl)phenol | (CAS-No.) 90-72-2    | 1 - 2,5 | Acute toxicity (oral), Category 4, H302<br>Skin corrosion/irritation, Category 2, H315<br>Serious eye damage/eye irritation, Category 2A, H319  |
| 3-Aminopropyltriethoxysilan           | (CAS-No.) 919-30-2   | 1 - 2,5 | Acute toxicity (oral), Category 4, H302<br>Skin corrosion/irritation, Category 1B, H314   |

Full text of H-statements: see section 16

# HIT-RE 500 V3, B

## 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.  |
| First-aid measures after skin contact | Wash with plenty of water/.... Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.                              |
| First-aid measures after eye contact  | Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist. |
| First-aid measures after ingestion    | Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor.   |

#### 4.2. Most important symptoms 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.   |

# HIT-RE 500 V3, B

## 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. 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  | No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety. |
| Consumer exposure controls       | Avoid contact during pregnancy/while nursing.  |
| Other information                | Do not eat, drink or smoke during use.   |

# HIT-RE 500 V3, B

## Safety Data Sheet

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

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective clothing Long sleeved protective clothing

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                                     | red.                   |
| 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                                    | 1.31 g/cm <sup>3</sup> |
| Solubility                                 | insoluble in water.    |



# HIT-RE 500 V3, B

## Safety Data Sheet

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

|                      |                      |
|----------------------|----------------------|
| Log Pow              | No data available    |
| Viscosity, kinematic | No data available    |
| Viscosity, dynamic   | 50 - 70 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.

### 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)       | May be harmful if swallowed. |
| Acute toxicity (dermal)     | Not classified               |
| Acute toxicity (inhalation) | Not classified               |

| <b>2-methyl-1,5-pentanediamine (15520-10-2)</b> |                  |
|---|------------------|
| LD50 oral rat                                   | 1690 mg/kg (Rat) |
| LD50 dermal rat                                 | 1870 mg/kg       |
| LC50 inhalation rat (mg/l)                      | 4.9 mg/l         |
| <b>Phenol, styrenated (61788-44-1)</b>          |                  |
| LD50 oral rat                                   | > 2500 mg/kg     |
| LD50 dermal rat                                 | > 2000 mg/kg     |
| LC50 inhalation rat (mg/l)                      | 158.31 mg/l/4h   |
| <b>m-Xylylenediamine (1477-55-0)</b>            |                  |
| 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     |

# HIT-RE 500 V3, B

## Safety Data Sheet

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

|  |   |
|--|---|
| <b>3-Aminopropyltriethoxysilan (919-30-2)</b>          |   |
| LD50 oral rat  | 1.57 ml/kg  |
| <b>2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)</b> |   |
| LD50 oral rat  | 2169 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; 2169 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rat  | > 2000 mg/kg (Rat; Literature study; Other; >1 ml/kg; Rat; Experimental value)  |
| Skin corrosion/irritation                              | Causes severe skin burns and eye damage.<br>pH: 11.5  |
| Serious eye damage/irritation                          | Serious eye damage, category 1, implicit<br>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                                   | May cause respiratory irritation.   |
| 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. |
| Hazardous to the aquatic environment, short-term (acute)                             | Harmful to aquatic life.                           |
| Classification procedure (Hazardous to the aquatic environment, short-term (acute))  | Calculation method                                 |
| Hazardous to the aquatic environment, long-term (chronic)                            | Harmful to aquatic life with long lasting effects. |
| Classification procedure (Hazardous to the aquatic environment, long-term (chronic)) | Calculation method                                 |

|   |                       |
|---|-----------------------|
| <b>2-methyl-1,5-pentanediamine (15520-10-2)</b> |                       |
| LC50 fish 1                                     | 130 mg/l (LC50; 48 h) |
| LOEC (acute)                                    | 1800 mg/l             |
| NOEC (acute)                                    | 1000 mg/l             |

|  |                          |
|--|--------------------------|
| <b>Phenol, styrenated (61788-44-1)</b> |                          |
| LC50 fish 1                            | 5.6 mg/l                 |
| LC50 other aquatic organisms 1         | 9.7 mg/l                 |
| EC50 Daphnia 1                         | 1.44 mg/l                |
| NOEC (acute)                           | 3.2 mg/l                 |
| Threshold limit algae 1                | 0.326 mg/l (72 h; Algae) |
| Threshold limit algae 2                | 0.14 mg/l (72 h; Algae)  |

|                                      |            |
|--------------------------------------|------------|
| <b>m-Xylylenediamine (1477-55-0)</b> |            |
| 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   |

|  |  |
|--|--|
| <b>2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)</b> |  |
| LC50 fish 1  | > 100 mg/l (96 h; Pisces; Nominal concentration)           |
| EC50 Daphnia 1   | 10 - 100 mg/l (Invertebrata; Estimated value)              |
| EC50 other aquatic organisms 1                         | 84 mg/l (72 h; Desmodismus subspicatus; growth rate; ECHA) |

# HIT-RE 500 V3, B

## Safety Data Sheet

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

|                         |  |
|-------------------------|--|
| LC50 fish 2             | 70.9 mg/l (96 h; Pisces)   |
| ErC50 (algae)           | 84 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP) |
| NOEC (chronic)          | 2 mg/l (28 d; activated sludge, domestic; respiration rate; ECHA)  |
| Threshold limit algae 1 | 10 - 100, Algae  |
| Threshold limit algae 2 | 84 mg/l (72 h; Scenedesmus subspicatus; Growth rate)   |

### 12.2. Persistence and degradability

|  |   |
|--|---|
| <b>HIT-RE 500 V3, B</b>                |   |
| Persistence and degradability          | May cause long-term adverse effects in the environment. |
| <b>Phenol, styrenated (61788-44-1)</b> |   |
| Biochemical oxygen demand (BOD)        | 0.000231 g O <sub>2</sub> /g substance                  |
| Chemical oxygen demand (COD)           | 0.004827 g O <sub>2</sub> /g substance                  |

### 12.3. Bioaccumulative potential

|  |   |
|--|---|
| <b>HIT-RE 500 V3, B</b>                                |   |
| Bioaccumulative potential                              | Not established.  |
| <b>2-methyl-1,5-pentanediamine (15520-10-2)</b>        |   |
| Log Pow  | 0.27 (Estimated value)  |
| Bioaccumulative potential                              | Low bioaccumulation potential (Log Kow < 4).  |
| <b>Phenol, styrenated (61788-44-1)</b>                 |   |
| BCF fish 2   | 3246 mg/l   |
| Log Pow  | 6.24 - 7.77 (Experimental value; OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method) |
| Bioaccumulative potential                              | Bioaccumulative potential.  |
| <b>2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)</b> |   |
| Log Pow  | 0.77 (Literature; 0.219; Experimental value; Equivalent or similar to OECD 107; 21.5 °C)                  |
| Bioaccumulative potential                              | Low bioaccumulation potential (Log Kow < 4).  |

### 12.4. Mobility in soil

|  |  |
|--|--|
| <b>2-methyl-1,5-pentanediamine (15520-10-2)</b>        |  |
| Log Pow  | See section 12.1 on ecotoxicology                      |
| <b>Phenol, styrenated (61788-44-1)</b>                 |  |
| Log Pow  | See section 12.1 on ecotoxicology                      |
| Ecology - soil   | No (test) data on mobility of the substance available. |
| <b>2,4,6-tris(dimethylaminomethyl)phenol (90-72-2)</b> |  |
| Log Pow  | See section 12.1 on ecotoxicology                      |
| Log Koc  | See section 12.1 on ecotoxicology                      |
| Ecology - soil   | Highly mobile in soil.                                 |

### 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 500 V3, 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  |
|---|--|--|--|
| <b>14.1. UN number</b>  |  |  |  |
| 3259  | 3259   | 3259   | 3259   |
| <b>14.2. UN proper shipping name</b>  |  |  |  |
| AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)                     | AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)                | Amines, solid, corrosive, n.o.s. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)                | AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine)                |
| <b>Transport document description</b>   |  |  |  |
| UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II, (E) | UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II | UN 3259 Amines, solid, corrosive, n.o.s. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II | UN 3259 AMINES, SOLID, CORROSIVE, N.O.S. (2-methyl-1,5-pentanediamine, m-Xylylenediamine), 8, II |
| <b>14.3. Transport hazard class(es)</b>   |  |  |  |
| 8   | 8  | 8  | 8  |
|   |  |  |  |
| <b>14.4. Packing group</b>  |  |  |  |
| II  | II   | II   | II   |
| <b>14.5. Environmental hazards</b>  |  |  |  |
| Dangerous for the environment :<br>No   | Dangerous for the environment :<br>No<br>Marine pollutant : No                                   | Dangerous for the environment :<br>No  | Dangerous for the environment :<br>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 |

# HIT-RE 500 V3, B

## Safety Data Sheet

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

|                                |                       |
|--------------------------------|-----------------------|
| EmS-No. (Fire)                 | F-A                   |
| EmS-No. (Spillage)             | S-B                   |
| Stowage category (IMDG)        | A                     |
| Stowage and segregation (IMDG) | Separated from acids. |
| MFAG-No                        | 154                   |

### - Air transport

|                                 |      |
|---------------------------------|------|
| PCA packing instructions (IATA) | 859  |
| 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      | 13/05/2020 |
| Revision date   | 13/05/2020 |
| Supersedes      | 25/02/2019 |

Indication of changes:

| Section | Changed item            | Change   | Comments |
|---------|-------------------------|----------|----------|
| 2.1     | Classification (GHS UN) | Modified |          |

# HIT-RE 500 V3, 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  
IATA - International Air Transport Association  
EC50 - Median effective concentration  
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  
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:

|      |  |
|------|--|
| H227 | Combustible liquid                                 |
| H302 | Harmful if swallowed.                              |
| H303 | May be harmful if swallowed                        |
| H312 | Harmful in contact with skin.                      |
| H314 | Causes severe skin burns and eye damage.           |
| H315 | Causes skin irritation.                            |
| H317 | May cause an allergic skin reaction.               |
| H318 | Causes serious eye damage.                         |
| H319 | Causes serious eye irritation.                     |
| H332 | Harmful if inhaled.                                |
| H335 | May cause respiratory irritation.                  |
| 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 500 V3, A

## Safety Data Sheet

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

Issue date: 13/05/2020

Version: 2.3

Revision date: 13/05/2020

Supersedes: 25/02/2019

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

#### 1.1. Product identifier

|              |                  |
|--------------|------------------|
| Product form | Mixture          |
| Product name | HIT-RE 500 V3, 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 | Composite mortar component for fasteners in the construction industry |
|------------------------------|---|

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Hilti Bahrain W.L.L  
Warehouse No. 23 & 25, Gate 285, Road 4306  
Area 343, Mina Salman  
P.O. Box 11401  
Manama  
T +973 17811675  
[hiltibahrain@hilti.com](mailto:hiltibahrain@hilti.com) - <https://www.hilti-me.com/>

##### Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH  
Hiltistraße 6  
86916 Kaufering - Deutschland  
T +49 8191 906876  
[anchor.hse@hilti.com](mailto:anchor.hse@hilti.com)

#### 1.4. Emergency telephone number

|                  |   |
|------------------|---|
| Emergency number | Schweizerisches Toxikologisches Informationszentrum – 24h Service<br>+41 44 251 51 51 (international) |
|------------------|---|

### 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 ; butanedioldiglycidyl ether ; 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 or the unborn child.  
H411 - Toxic to aquatic life with long lasting effects.

# HIT-RE 500 V3, A

## Safety Data Sheet

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

### Precautionary statements (GHS UN)

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

### 2.3. Other hazards

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<br>Skin corrosion/irritation, Category 2, H315<br>Serious eye damage/eye irritation, Category 2A, H319<br>Skin sensitisation, Category 1, H317<br>Hazardous to the aquatic environment — Acute Hazard, Category 2, H401<br>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  | 10-20   | Skin corrosion/irritation, Category 2, H315<br>Serious eye damage/eye irritation, Category 2A, H319<br>Skin sensitisation, Category 1, H317<br>Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411  |
| butanedioldiglycidyl ether   | (CAS-No.) 2425-79-8  | 5 - 10  | Acute toxicity (oral), Category 4, H302<br>Acute toxicity (dermal), Category 4, H312<br>Acute toxicity (inhal.), Category 4, H332<br>Skin corrosion/irritation, Category 2, H315<br>Serious eye damage/eye irritation, Category 1, H318<br>Skin sensitisation, Category 1, H317<br>Hazardous to the aquatic environment — Acute Hazard, Category 3, H402<br>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<br>Serious eye damage/eye irritation, Category 1, H318<br>Skin sensitisation, category 1B, H317<br>Germ cell mutagenicity, Category 2, H341<br>Reproductive toxicity, Category 1B, H360<br>Hazardous to the aquatic environment — Chronic Hazard, Category 2, H411   |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane   | (CAS-No.) 2530-83-8  | 2.5 - 5 | Acute toxicity (dermal), Category 5, H313<br>Serious eye damage/eye irritation, Category 1, H318<br>Hazardous to the aquatic environment — Acute Hazard, Category 3, H402   |

Full text of H-statements: see section 16



# HIT-RE 500 V3, 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.   |

# HIT-RE 500 V3, A

## 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 | No specific measures identified.   |
| Environmental exposure controls  | No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety. |
| Consumer exposure controls       | Avoid contact during pregnancy/while nursing.  |
| Other information                | Do not eat, drink or smoke during use.   |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Materials for protective clothing Long sleeved protective clothing

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   | 6.6                    |
| 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                                    | 1.45 g/cm <sup>3</sup> |
| Solubility                                 | insoluble in water.    |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

|                      |                    |
|----------------------|--------------------|
| Log Pow              | No data available  |
| Viscosity, kinematic | No data available  |
| Viscosity, dynamic   | 45 - 59 Pa·s 23 °C |
| 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

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 |

| <b>Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)</b> |   |
|---|---|
| LD50 oral rat   | > 5000 mg/kg bodyweight (Rat; ECHA)   |
| LD50 dermal rat   | > 2000 mg/kg bodyweight (Rat; ECHA)   |
| <b>butanedioldiglycidyl ether (2425-79-8)</b>   |   |
| LD50 oral rat   | 2980 mg/kg (Rat)  |
| LD50 oral   | 1163 mg/kg (Rat; Exp. Key study ECHA)   |
| LD50 dermal rabbit  | 1130 mg/kg (Rabbit)   |
| <b>[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)</b>   |   |
| LD50 oral rat   | 8025 mg/kg bodyweight (Rat; Equivalent or similar to OECD 401; Experimental value)    |
| LD50 dermal rabbit  | 4250 mg/kg bodyweight (Rabbit; Experimental value; Equivalent or similar to OECD 402) |
| <b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b>                  |   |
| LD50 dermal rat   | > 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)               |
| Skin corrosion/irritation   | Causes severe skin burns and eye damage.<br>pH: 6.6                                   |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

|   |   |
|---|---|
| Serious eye damage/irritation                       | Serious eye damage, category 1, implicit<br>pH: 6.6 |
| Respiratory or skin sensitisation                   | May cause an allergic skin reaction.                |
| Germ cell mutagenicity                              | Suspected of causing genetic defects.               |
| Carcinogenicity                                     | Not classified                                      |
| Reproductive toxicity                               | May damage fertility or the unborn child.           |
| 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                               |

| <b>butanedioldiglycidyl ether (2425-79-8)</b>  |   |
|--|---|
| LC50 fish 1  | 24 mg/l (96 h; Pisces) ECHA   |
| LC50 other aquatic organisms 1   | > 160 mg/l  |
| NOEC (acute)   | 40 mg/l   |
| Threshold limit algae 1  | 88930 mg/l (96 h; Algae)  |
| <b>[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)</b>                        |   |
| LC50 fish 1  | 55 mg/l (96 h; Cyprinus carpio; Young)  |
| EC50 Daphnia 1   | 473 - 710 mg/l (48 h; Daphnia magna)  |
| LC50 fish 2  | 237 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)  |
| Threshold limit algae 1  | 119 mg/l (7 days; Anabaena flosaquae)   |
| Threshold limit algae 2  | 250 mg/l (72 h; Selenastrum capricornutum)  |
| <b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b> |   |
| 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.)  |

### 12.2. Persistence and degradability

| <b>HIT-RE 500 V3, A</b>  |   |
|--|---|
| Persistence and degradability  | May cause long-term adverse effects in the environment. |
| <b>Quartz (SiO2)</b>   |   |
| Persistence and degradability  | Biodegradability: not applicable.                       |
| Chemical oxygen demand (COD)   | Not applicable (inorganic)                              |
| ThOD   | Not applicable (inorganic)                              |
| <b>butanedioldiglycidyl ether (2425-79-8)</b>  |   |
| Biochemical oxygen demand (BOD)  | 0.01982 g O <sub>2</sub> /g substance                   |
| <b>2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)</b> |   |
| Persistence and degradability  | Not readily biodegradable in water.                     |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

### 12.3. Bioaccumulative potential

| HIT-RE 500 V3, A  |  |
|---|--|
| Bioaccumulative potential   | Not established.                               |
| Quartz (SiO <sub>2</sub> )  |  |
| Bioaccumulative potential   | No bioaccumulation data available.             |
| butanedioldiglycidyl ether (2425-79-8)  |  |
| Log Pow   | -0.15  |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)                        |  |
| Log Pow   | -0.92 (Estimated value)                        |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3) |  |
| BCF other aquatic organisms 1   | 31 (Estimated value, Fresh weight)             |
| Log Pow   | 3 (Estimated value, 25 °C)                     |
| Bioaccumulative potential   | Low potential for bioaccumulation (BCF < 500). |

### 12.4. Mobility in soil

| Quartz (SiO <sub>2</sub> )  |                                       |
|---|---------------------------------------|
| Ecology - soil  | Low potential for mobility in soil.   |
| butanedioldiglycidyl ether (2425-79-8)  |                                       |
| Log Pow   | See section 12.1 on ecotoxicology     |
| [3-(2,3-epoxypropoxy)propyl]trimethoxysilane (2530-83-8)                        |                                       |
| Log Pow   | See section 12.1 on ecotoxicology     |
| 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

|                       |                                     |
|-----------------------|-------------------------------------|
| 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.<br>(trimethylolpropane | CORROSIVE SOLID, N.O.S.<br>(trimethylolpropane | Corrosive solid, n.o.s.<br>(trimethylolpropane | CORROSIVE SOLID, N.O.S.<br>(trimethylolpropane |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

| ADR   | IMDG  | IATA   | RID  |
|---|---|--|--|
| triglycidylether)   | triglycidylether)   | triglycidylether)  | triglycidylether)  |
| <b>Transport document description</b>   |   |  |  |
| 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 |
| <b>14.3. Transport hazard class(es)</b>   |   |  |  |
| 8   | 8   | 8  | 8  |
|   |   |  |  |
| <b>14.4. Packing group</b>  |   |  |  |
| III   | III   | III  | III  |
| <b>14.5. Environmental hazards</b>  |   |  |  |
| Dangerous for the environment : Yes   | Dangerous for the environment : Yes<br>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                     |
| 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 |

# HIT-RE 500 V3, A

## Safety Data Sheet

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

### - 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      | 13/05/2020 |
| Revision date   | 13/05/2020 |
| Supersedes      | 25/02/2019 |

Indication of changes:

| Section | Changed item           | Change   | Comments |
|---------|------------------------|----------|----------|
| 9       | pH                     | Added    |          |
| 14      | Transport information  | Modified |          |
| 16      | Additional information | Added    |          |

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  
IATA - International Air Transport Association  
EC50 - Median effective concentration  
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  
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

Other information

None.



# HIT-RE 500 V3, A

## Safety Data Sheet

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

---

Full text of H-statements:

|      |   |
|------|---|
| H302 | Harmful if swallowed.   |
| H312 | Harmful in contact with skin.                                   |
| H313 | May be harmful in contact with skin                             |
| H314 | Causes severe skin burns and eye damage.                        |
| H315 | Causes skin irritation.   |
| H317 | May cause an allergic skin reaction.                            |
| H318 | Causes serious eye damage.                                      |
| H319 | Causes serious eye irritation.                                  |
| H332 | Harmful if inhaled.   |
| H341 | Suspected of causing genetic defects.                           |
| H360 | May damage fertility or the unborn child.                       |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| 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.*