

# **HIT-RE 100**

### Safety information for 2-Component-products

Issue date: 11/05/2020

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Supersedes: 11/06/2019

Version: 3.0

### **SECTION 1: Kit identification**

### **1.1 Product identifier**

Product name



Product code

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

Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway TX 75024 Plano - USA T +1 9724035800 1-800-879-8000 toll free - F +1 918 254 0522

### **SECTION 2: General information**

Storage

Storage temperature : 5 - 25 °C

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

This Kit should be handled in accordance with good laboratory practices and appropriate personal protective equipment should be used

## **SECTION 3: Kit contents**

### **Classification of the Product**

### **GHS-US** classification

| Acute Tox. 4 (Oral) | H302 - | Harmful if swallowed.                            |
|---------------------|--------|--|
| Skin Corr. 1B       | H314 - | Causes severe skin burns and eye damage.         |
| Eye Dam. 1          | H318 - | Causes serious eye damage.                       |
| Skin Sens. 1        | H317 - | May cause an allergic skin reaction.             |
| Muta. 2             | H341 - | Suspected of causing genetic defects.            |
| Repr. 1B            | H360 - | May damage fertility or the unborn child.        |
| Aquatic Chronic 2   | H411 - | Toxic to aquatic life with long lasting effects. |

### Label elements

# GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazardous ingredients Hazard statements (GHS US)



Epoxy resin, Amines Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. May damage fertility or the unborn child.



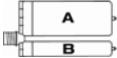
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|                                   | Toxic to aquatic life with long lasting effects.  |
|-----------------------------------|---|
| Precautionary statements (GHS US) | <ul> <li>Wear eye protection, protective clothing, protective gloves.</li> <li>Do not get in eyes, on skin, or on clothing.</li> <li>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>If skin irritation or rash occurs: Get medical advice/attention.</li> <li>If eye irritation persists: Get medical advice/attention.</li> <li>If on skin: Wash with plenty of water.</li> </ul> |

### **Additional information**

2-component-foilpack, contains: Component A: Epoxy resin, Reactive diluent, inorganic filler Component B: Amine hardener, inorganic filler



| Name          | General description | Quantity | Unit         | GHS-US classification   |
|---------------|---------------------|----------|--------------|---|
| HIT-RE 100, A |                     | 1        | pcs (pieces) | Skin Corr. 1C, H314<br>Skin Sens. 1, H317<br>Muta. 2, H341<br>Repr. 1B, H360<br>Aquatic Chronic 2, H411 |
| HIT-RE 100, B |                     | 1        | pcs (pieces) | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1B, H314<br>Skin Sens. 1, H317<br>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<br>Notify authorities if liquid enters sewers or public waters<br>Avoid release to the environment<br>Full or only partially emptied cartridges must be disposed of as special waste in accordance<br>with official regulations.<br>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<br>Avoid contact with skin and eyes<br>Wash hands and other exposed areas with mild soap and water before eating, drinking or<br>smoking and when leaving work<br>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<br>Mechanically recover the product<br>On land, sweep or shovel into suitable containers<br>Store away from other materials.   |
| For containment               | Collect spillage.  |
| Incompatible materials        | Sources of ignition<br>Direct sunlight   |
| Incompatible products         | Strong bases<br>Strong acids   |



# **HIT-RE 100**

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#### **SECTION 6: First aid measures** Get immediate medical advice/attention. First-aid measures after eye contact 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. Never give anything by mouth to an unconscious person First-aid measures general 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





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# SECTION 1: Identification

| 1.1. Identification   |   |
|---|---|
| Product form  | Mixture   |
| Product name  | HIT-RE 100, B   |
| Product code  | BU Anchor   |
| 1.2. Recommended use and restriction  | is on use   |
| Recommended use   | Composite mortar component for fasteners in the construction industry   |
| Restrictions on use   | For professional use only   |
| 1.3. Supplier   |   |
| <b>Supplier</b><br>Hilti, Inc.<br>Legacy Tower, Suite 1000<br>7250 Dallas Parkway<br>Plano, TX 75024 - USA<br>T +1 9724035800<br>1-800-879-8000 toll free - F +1 918 254 0522 | Department issuing data specification sheet<br>Hilti Entwicklungsgesellschaft mbH<br>Hiltistraße 6<br>Kaufering, 86916 - Deutschland<br>T +49 8191 906876<br>anchor.hse@hilti.com |
| 1.4. Emergency telephone number   |   |
| Emergency number  | Chem-Trec<br>Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)<br>Tel.: 703 527 3887 (Other countries)<br>+1 918 8723000<br>1-800-879-8000 toll free                         |

# SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

### **GHS-US** classification

Acute toxicity (oral), Category 4 Skin corrosion/irritation, Category 1B Skin sensitisation, Category 1 Hazardous to the aquatic environment — Chronic Hazard, Category 3 Full text of H statements : see section 16

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

### **GHS US labelling**

Hazard pictograms (GHS US)



Signal word (GHS US) Hazard statements (GHS US)

H314 - Causes severe skin burns and eye damage.

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|                                   | H317 - May cause an allergic skin reaction.<br>H412 - Harmful to aquatic life with long lasting effects.   |
|-----------------------------------|--|
| Precautionary statements (GHS US) | <ul> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P262 - Do not get in eyes, on skin, or on clothing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P302+P352 - If on skin: Wash with plenty of water.</li> </ul> |

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substances**

Not applicable

#### 3.2. **Mixtures**

| Name  | Product identifier    | %       | GHS-US classification   |
|---|-----------------------|---------|---|
| m-Xylylenediamine   | (CAS-No.) 1477-55-0   | 25 - 40 | Acute Tox. 4 (Oral), H302<br>Acute Tox. 4<br>(Inhalation:dust,mist), H332<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317   |
| Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-<br>benzenediol and ethenylbenzene | (CAS-No.) 710292-85-6 | 10 - 25 | Skin Sens. 1B, H317   |
| Quartz (SiO2)   |                       | 10 - 25 | Carc. 1A, H350  |
| resorcinol  | (CAS-No.) 108-46-3    | 0,1 - 1 | Acute Tox. 4 (Oral), H302<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317<br>STOT SE 1, H370<br>STOT SE 2, H371<br>Aquatic Acute 1, H400<br>Aquatic Chronic 3, H412 |

Full text of hazard classes and H-statements : see section 16

# **SECTION 4: First-aid measures**

| 4.1. Description of first aid measures |   |
|--|---|
| First-aid measures general             | Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).   |
| First-aid measures after inhalation    | Remove person to fresh air and keep comfortable for breathing.  |
| First-aid measures after skin contact  | Wash with plenty of water/ Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get immediate medical advice/attention.                                  |
| First-aid measures after eye contact   | Get immediate medical advice/attention. Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist. |

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| First-aid measures after ingestion                     | Do not induce vomiting. Rinse mouth. Immediately call a POISON CENTER/doctor. |
|--|---|
| 4.2. Most important symptoms and effe                  | ects (acute and delayed)  |
| Potential adverse human health effects and<br>symptoms | No additional information available.  |
| 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.  |

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

| SECT     | ION 5: Fire-fighting measures                 |   |  |
|----------|---|---|--|
| 5.1.     | Suitable (and unsuitable) extinguishing media |   |  |
| Suitable | e extinguishing media                         | Foam. Dry powder. Carbon dioxide. Water spray. Sand.  |  |
| Unsuita  | ble extinguishing media                       | Do not use a heavy water stream.  |  |
| 5.2.     | Specific hazards arising from the o           | chemical  |  |
| Hazardo  | bus decomposition products in case of fire    | Thermal decomposition generates : Carbon dioxide. Carbon monoxide.  |  |
| 5.3.     | Special protective equipment and              | precautions for fire-fighters   |  |
| Firefigh | ting 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. |  |
| Protecti | on 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   |   |  |
| Emerge                                 | ncy procedures  | Evacuate unnecessary personnel.   |  |
| 6.1.2.                                 | For emergency responders  |   |  |
| Protecti                               | ve equipment  | Use personal protective equipment as required. Equip cleanup crew with proper protection. |  |
| Emerge                                 | ncy 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.<br>Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away<br>from other materials. |

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### Other information

Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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

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

# 7.2. Conditions for safe storage, including any incompatibilities Technical measures Comply with applicable regulations.

| Storage conditions        | Protect from sunlight. Store in a well-ventilated place. |
|---------------------------|--|
| Incompatible products     | Strong bases. Strong acids.                              |
| Incompatible materials    | Sources of ignition. Direct sunlight.                    |
| Storage temperature       | 41 – 77 °F   |
| Heat and ignition sources | Keep away from heat and direct sunlight.                 |

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| HIT-RE 100, B   |   |  |  |
|---|---|--|--|
| USA - ACGIH - Occupational Exposure Limit   | \$  |  |  |
| Local name  | Carbon black  |  |  |
| ACGIH TWA (mg/m³)   | 3 mg/m <sup>3</sup> (I - Inhalable particulate matter)  |  |  |
| Remark (ACGIH)  | TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)  |  |  |
| Regulatory reference  | ACGIH 2020  |  |  |
| USA - ACGIH - Biological Exposure Indices   | USA - ACGIH - Biological Exposure Indices   |  |  |
| Local name  | STYRENE   |  |  |
| Biological Exposure Indices (BEI)   | 400 mg/g creatinine Parameter: Mandelic acid plus phenylglyoxylic acid - Medium: urine -<br>Sampling time: End of shift - Notations: Ns<br>40 μg/l Parameter: Styrene - Medium: urine - Sampling time: End of shift |  |  |
| Regulatory reference  | ACGIH 2020  |  |  |
| USA - OSHA - Occupational Exposure Limits   |   |  |  |
| Local name  | Carbon black  |  |  |
| OSHA PEL (TWA) (mg/m <sup>3</sup> )   | 3.5 mg/m <sup>3</sup>   |  |  |
| Regulatory reference (US-OSHA)  | OSHA Annotated Table Z-1  |  |  |
| Formaldehyde, telomer with 1,3-benzenedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) |   |  |  |
| No additional information available   |   |  |  |

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| resorcinol (108-46-3)            |   |
|----------------------------------|---|
| USA - ACGIH - Occupational Expos | ure Limits  |
| Local name                       | Resorcinol  |
| ACGIH TWA (ppm)                  | 10 ppm  |
| ACGIH STEL (ppm)                 | 20 ppm  |
| Remark (ACGIH)                   | Eye & skin irr  |
| Regulatory reference             | ACGIH 2020  |
| m-Xylylenediamine (1477-55-0)    |   |
| USA - ACGIH - Occupational Expos | ure Limits  |
| Local name                       | m-Xylene α,α'-diamine   |
| ACGIH Ceiling (ppm)              | 0.018 ppm   |
| Remark (ACGIH)                   | Eye, skin, & GI irr   |
| Regulatory reference             | ACGIH 2020  |
| Quartz (SiO2)                    |   |
| USA - ACGIH - Occupational Expos | ure Limits  |
| Local name                       | Silica crystaline - quartz  |
| ACGIH TWA (mg/m³)                | 0.025 mg/m <sup>3</sup> (Respirable fraction)   |
| Remark (ACGIH)                   | TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen)                                |
| Regulatory reference             | ACGIH 2020  |
| USA - OSHA - Occupational Exposu | ire Limits  |
| Local name                       | Silica, crystalline quartz, respirable dust   |
| Remark (OSHA)                    | (3) See Table Z-3.  |
| Additional information           | The product has a pasty consistency. Exposure limit values for respirable dusts are not relevan 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.            |

### 8.3. Individual protection measures/Personal protective equipment

### Personal protective equipment:

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

### Hand protection:

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

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

### Eye protection:

Wear security glasses which protect from splashes

| Туре           | Use     | Characteristics |
|----------------|---------|-----------------|
| Safety glasses | Droplet | clear           |

Skin and body protection:

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### Wear suitable protective clothing

### Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

| Solid                        |
|------------------------------|
| Thixotropic paste.           |
| Red-brown to black           |
| Amine-like                   |
| No data available            |
| 11.5                         |
| No data available            |
| Non flammable.               |
| No data available            |
| No data available            |
| No data available            |
| 1.41 g/cm3 DIN EN ISO 1183-3 |
| insoluble in water.          |
| No data available            |
| 43 – 57 Pa⋅s HN-0333         |
| No data available            |
| No data available            |
| No data available            |
|                              |

### 9.2. Other information

No additional information available

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# **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.

| 11.1. Information on toxicologic     |   |
|--------------------------------------|---|
| Acute toxicity (oral)                | Harmful if swallowed.   |
| Acute toxicity (dermal)              | Not classified  |
| Acute toxicity (inhalation)          | Not classified  |
| ATE US (oral)                        | 1706.776 mg/kg bodyweight   |
| Formaldehyde, telomer with 1,3-benze | nedimethanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) |
| LD50 oral rat                        | > 2000 mg/kg  |
| LD50 dermal rat                      | > 2000 mg/kg  |
| m-Xylylenediamine (1477-55-0)        |   |
| LD50 oral rat                        | 1090 mg/kg  |
| LD50 dermal rat                      | > 3100 mg/kg  |
| Skin corrosion/irritation            | Causes severe skin burns.   |
|                                      | pH: 11.5  |
| Serious eye damage/irritation        | Assumed to cause serious eye damage                               |
|                                      | pH: 11.5  |
| Respiratory or skin sensitisation    | May cause an allergic skin reaction.                              |
| Germ cell mutagenicity               | Not classified  |
| Carcinogenicity                      | Not classified  |
| resorcinol (108-46-3)                |   |
| IARC group                           | 3 - Not classifiable  |
| Quartz (SiO2)                        |   |
| IARC group                           | 1 - Carcinogenic to humans  |

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| Reproductive toxicity                               | Not classified  |
|---|---|
| STOT-single exposure                                | Not classified  |
| resorcinol (108-46-3)                               |   |
| STOT-single exposure                                | Causes damage to organs (central nervous system, blood) (oral). May cause damage to organs (respiratory system) (oral). |
| STOT-repeated exposure                              | Not classified  |
| Aspiration hazard                                   | Not classified  |
| Viscosity, kinematic                                | No data available   |
| Potential adverse human health effects and symptoms | No additional information available.  |
| 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.  |

# **SECTION 12: Ecological information**

| 12.1. Toxicity                       |   |  |
|--------------------------------------|---|--|
| Ecology - water                      | Harmful to aquatic life with long lasting effects.                |  |
| Formaldehyde, telomer with 1,3-benze | nedimethanamine, 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)                | 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. |
|                               |   |
| Quartz (SiO2)                 |   |
| Persistence and degradability | Biodegradability: not applicable.                       |
| Chemical oxygen demand (COD)  | Not applicable (inorganic)                              |
| ThOD                          | Not applicable (inorganic)                              |

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| 12.3. Bioaccumulative potential<br>HIT-RE 100. B            |  |  |  |
|---|--|--|--|
| Not established.  |  |  |  |
| thanamine, 1,3-benzenediol and ethenylbenzene (710292-85-6) |  |  |  |
| ≥ 12.9  |  |  |  |
| 5.14  |  |  |  |
| Quartz (SiO2)   |  |  |  |
| No bioaccumulation data available.                          |  |  |  |
| 12.4. Mobility in soil                                      |  |  |  |
| Quartz (SiO2)   |  |  |  |
| Low potential for mobility in soil.                         |  |  |  |
|   |  |  |  |

#### 12.5. Other adverse effects

Other information

Avoid release to the environment.

| SECTION 13: Disposal considerations        |  |  |  |
|--|--|--|--|
| 13.1. Disposal 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 / IATA / IMDG / RID

| ADR   | IMDG  | ΙΑΤΑ   | RID   |
|---|---|--|---|
| 14.1. UN number   |   |  |   |
| UN 3259   | UN 3259   | UN 3259  | UN 3259   |
| 14.2. UN proper shipping name                           |   |  |   |
| AMINES, SOLID, CORROSIVE,<br>N.O.S. (m-Xylylenediamine) | AMINES, SOLID, CORROSIVE,<br>N.O.S. (m-Xylylenediamine) | Amines, solid, corrosive, n.o.s. (m-<br>Xylylenediamine) | AMINES, SOLID, CORROSIVE,<br>N.O.S. (m-Xylylenediamine) |
| Transport document description                          |   |  |   |
| UN 3259 AMINES, SOLID,                                  | UN 3259 AMINES, SOLID,                                  | UN 3259 Amines, solid, corrosive,                        | UN 3259 AMINES, SOLID,                                  |

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|   | I  |                                       |  |
|---|--|---------------------------------------|--|
| CORROSIVE, N.O.S. (m-<br>Xylylenediamine), 8, II, (E) | CORROSIVE, N.O.S. (m-<br>Xylylenediamine), 8, II               | n.o.s. (m-Xylylenediamine), 8, II     | CORROSIVE, N.O.S. (m-<br>Xylylenediamine), 8, II |
|   |  |                                       |  |
| 14.3. Transport hazard class(e                        | es)  |                                       |  |
| 8   | 8  | 8                                     | 8  |
| 8   | B  | 8                                     | B  |
| 14.4. Packing group                                   | I  |                                       | <u> </u>   |
| ll  | II   | II                                    | II   |
| 14.5. Environmental hazards                           |  |                                       |  |
| 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 availa                   | able   |                                       |  |

### 14.6. Special precautions for user

### **Overland transport**

| Classification code (ADR)<br>Special provisions (ADR)<br>Limited quantities (ADR)<br>Packing instructions (ADR)<br>Mixed packing provisions (ADR)<br>Transport category (ADR) | C8<br>274<br>1kg<br>P002, IBC08<br>MP10<br>2 |
|---|--|
| Orange plates   | 80   |
|   | 3259   |
| 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  |
| 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  |
|   |  |

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| Limited quantities (RID)   | 1kg         |
|----------------------------|-------------|
| Packing instructions (RID) | P002, IBC08 |

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

Not applicable

# **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

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

| resorcinol (108-46-3) |         |
|-----------------------|---------|
| CERCLA RQ             | 5000 lb |

### 15.2. International regulations

### CANADA

| m-Xylylenediamine (1477-55-0)                         |  |
|---|--|
| Listed on the Canadian DSL (Domestic Substances List) |  |
| Quartz (SiO2)   |  |
| Listed on the Canadian DSL (Domestic Substances List) |  |

### **EU-Regulations**

### National regulations

| Quartz (SiO2)  |
|--|
| Listed on IARC (International Agency for Research on Cancer) |
|  |

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

# **SECTION 16: Other information**

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

Revision date Other information 05/11/2020 None.

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| 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.   |  |
| H350                  | May cause cancer.   |  |
| H370                  | Causes damage to organs.  |  |
| H371                  | May cause damage to organs.   |  |
| H400                  | Very toxic to aquatic life.   |  |
| H412                  | Harmful to aquatic life with long lasting effects.  |  |
| eviations and acronym | IS:   |  |
| 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   |  |
| ΙΑΤΑ                  | 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  |  |
| РВТ                   | 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  |  |

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| NFPA health hazard | 3 - Materials that, under emergency conditions, can cause serious or permanent injury. |
|--------------------|--|
| NFPA fire hazard   | 1 - Materials that must be preheated before ignition can occur.                        |
| NFPA reactivity    | 0 - Material that in themselves are normally stable, even under fire conditions.       |

Indication of changes:

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

SDS\_US\_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.



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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 05/11/2020 Revision date: 05/11/2020 Supersedes: 11/06/2018 Version: 3.0

# **SECTION 1: Identification**

| 1.1. Identification   |   |
|---|---|
| Product form  | Mixture   |
| Product name  | HIT-RE 100, A   |
| Product code  | BU Anchor   |
| 1.2. Recommended use and restriction  | ns on use   |
| Recommended use   | Composite mortar component for fasteners in the construction industry   |
| Restrictions on use   | For professional use only   |
| 1.3. Supplier   |   |
| <b>Supplier</b><br>Hilti, Inc.<br>Legacy Tower, Suite 1000<br>7250 Dallas Parkway<br>Plano, TX 75024 - USA<br>T +1 9724035800<br>1-800-879-8000 toll free - F +1 918 254 0522 | Department issuing data specification sheet<br>Hilti Entwicklungsgesellschaft mbH<br>Hiltistraße 6<br>Kaufering, 86916 - Deutschland<br>T +49 8191 906876<br>anchor.hse@hilti.com |
| 1.4. Emergency telephone number   |   |
| Emergency number  | Chem-Trec<br>Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)<br>Tel.: 703 527 3887 (Other countries)<br>+1 918 8723000<br>1-800-879-8000 toll free                         |
| SECTION 2: Hazard(s) identificatio  | n   |

# 2.1. Classification of the substance or mixture

### **GHS-US** classification

Skin corrosion/irritation, Category 1C Skin sensitisation, Category 1 Germ cell mutagenicity, Category 2 Reproductive toxicity, Category 1B Hazardous to the aquatic environment — Chronic Hazard, Category 2 Full text of H statements : see section 16

- 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..
- H411 Toxic to aquatic life with long lasting effects.

2.2. GHS Label elements, including precautionary statements

### GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US)

Danger

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| Hazard statements (GHS US)        | H314 - Causes severe skin burns and eye damage.<br>H317 - May cause an allergic skin reaction.<br>H341 - Suspected of causing genetic defects.<br>H360 - May damage fertility<br>H411 - Toxic to aquatic life with long lasting effects.   |
|-----------------------------------|--|
| Precautionary statements (GHS US) | <ul> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P262 - Do not get in eyes, on skin, or on clothing.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.</li> <li>P337+P313 - If eye irritation persists: Get medical advice/attention.</li> <li>P302+P352 - If on skin: Wash with plenty of water.</li> </ul> |

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/information on ingredients**

#### 3.1. **Substances**

Not applicable

#### 3.2. **Mixtures**

| Name   | Product identifier    | %       | GHS-US classification   |
|--|-----------------------|---------|---|
| Quartz (SiO2)  |                       | 25 - 40 | Carc. 1A, H350  |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane                      | (CAS-No.) 1675-54-3   | 25 - 40 | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Skin Sens. 1, H317                                  |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-<br>epoxypropane and phenol | (CAS-No.) 9003-36-5   | 10 - 25 | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Skin Sens. 1, H317                                  |
| Reaction products of hexane-1,6-diol with 2-(chloromethyl)                               | (CAS-No.) 933999-84-9 | 10 - 25 | Skin Irrit. 2, H315<br>Eye Irrit. 2A, H319<br>Skin Sens. 1, H317<br>Aquatic Chronic 3, H412       |
| trimethylolpropane triglycidylether  | (CAS-No.) 30499-70-8  | 5 – 10  | Skin Corr. 1C, H314<br>Eye Dam. 1, H318<br>Skin Sens. 1B, H317<br>Muta. 2, H341<br>Repr. 1B, H360 |

Full text of hazard classes and H-statements : see section 16

## **SECTION 4: First-aid measures**

| 4.1. Desc       | cription of first aid measures |  |
|-----------------|--------------------------------|--|
| First-aid measu | res general                    | Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).                        |
| First-aid measu | res 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 measu | res 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. |

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| First-aid measures after eye contact                | Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do.<br>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 (acute and delayed)  |
| Potential adverse human health effects and symptoms | No additional information available.   |
| Symptoms/effects after inhalation                   | May cause an allergic skin reaction.   |
| Symptoms/effects after skin contact                 | Causes skin irritation.  |

Causes serious eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

No additional information available

Symptoms/effects after eye contact

# **SECTION 5: Fire-fighting measures**

| 5.1.     | Suitable (and unsuitable) extinguis        | shing media   |
|----------|--|---|
| Suitable | e extinguishing media                      | Water spray. Carbon dioxide. Dry powder. Foam. Sand.  |
| Unsuita  | able extinguishing media                   | Do not use a heavy water stream.  |
| 5.2.     | Specific hazards arising from the          | chemical  |
| Hazard   | ous decomposition products in case of fire | Thermal decomposition generates : Carbon dioxide. Carbon monoxide.  |
| 5.3.     | Special protective equipment and           | precautions for fire-fighters   |
| Firefigh | ting 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. |
| Protect  | ion 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.   |
| <b>6.1.1.</b><br>Emerge | For non-emergency personnel<br>ncy procedures                       | Evacuate unnecessary personnel.   |
| 6.1.2.                  | For emergency responders  |   |
| Protectiv               | ve equipment  | Use personal protective equipment as required. Equip cleanup crew with proper protection. |
| Emerge                  | ncy 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 conta | inment   | Collect spillage. |
|           |  |                   |

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| Methods    | for cleaning up             | This material and its container must be disposed of in a safe way, and as per local legislation.<br>Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away<br>from other materials. |
|------------|-----------------------------|--|
| Other info | ormation                    | Dispose of materials or solid residues at an authorized site.  |
| 6.4.       | Reference to other sections |  |

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

# **SECTION 7: Handling and storage**

| 7.1. Precautions for safe handling      |   |
|---|---|
| Precautions for safe handling           | Wear personal protective equipment. Avoid contact with skin and eyes. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.                       |
| 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, inclu | ding any incompatibilities  |
| Storage conditions                      | Protect from sunlight.  |
| Incompatible products                   | Strong bases. Strong acids.   |
| Incompatible materials                  | Sources of ignition. Direct sunlight.   |
| Storage temperature                     | 41 – 77 °F  |

Keep away from heat and direct sunlight.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Heat and ignition sources

| HIT-RE 100, A  |  |  |  |
|--|--|--|--|
| USA - ACGIH - Occupational Exposure Limits                               | USA - ACGIH - Occupational Exposure Limits   |  |  |
| Local name   | Silica crystaline - quartz   |  |  |
| ACGIH TWA (mg/m³)  | 0.025 mg/m <sup>3</sup> (R - Respirable particulate matter)                        |  |  |
| Remark (ACGIH)   | TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen) |  |  |
| Regulatory reference   | ACGIH 2020   |  |  |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneox                            | ymethylene)]bisoxirane (1675-54-3)   |  |  |
| No additional information available                                      |  |  |  |
| Formaldehyde, oligomeric reaction products                               | with 1-chloro-2,3-epoxypropane and phenol (9003-36-5)                              |  |  |
| No additional information available                                      |  |  |  |
| Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9) |  |  |  |
| No additional information available                                      |  |  |  |
| Quartz (SiO2)  |  |  |  |
| USA - ACGIH - Occupational Exposure Limits                               |  |  |  |
| Local name   | Silica crystaline - quartz   |  |  |
| ACGIH TWA (mg/m³)  | 0.025 mg/m <sup>3</sup> (Respirable fraction)                                      |  |  |
| Remark (ACGIH)   | TLV® Basis: Pulm fibrosis; lung cancer. Notations: A2 (Suspected Human Carcinogen) |  |  |
| Regulatory reference   | ACGIH 2020   |  |  |

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| USA - OSHA - Occupational Exp                    | osure Limits   |
|--|--|
| Local name                                       | Silica, crystalline quartz, respirable dust  |
| Remark (OSHA)                                    | (3) See Table Z-3.   |
| trimethylolpropane triglycidylether (30499-70-8) |  |
| No additional information available              |  |
| Additional information                           | The product has a party consistency. Experience limit values for recoirable dusts are not relevant |

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 Environmental exposure controls Ensure good ventilation of the work station. Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

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

#### Hand protection:

Wear protective gloves. The permeation time is not the maximum wearing time! Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration.

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

### Eye protection:

Wear security glasses which protect from splashes

| Туре           | Use     | Characteristics |
|----------------|---------|-----------------|
| Safety glasses | Droplet | clear           |

#### Skin and body protection:

Wear suitable protective clothing

#### Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

|            |       | <br> |  |
|------------|-------|------|--|
| Physical s | state |      |  |
| Appearan   | ice   |      |  |
| Colour     |       |      |  |

Solid Thixotropic paste. Light grey

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| Odeur   | ah ava ata viati a          |
|---|-----------------------------|
| Odour   | characteristic              |
| Odour threshold                                 | No data available           |
| рН  | 6.2                         |
| Melting point                                   | No data available           |
| Freezing point                                  | No data available           |
| Boiling point                                   | No data available           |
| Flash point                                     | No data available           |
| Relative evaporation rate (butylacetate=1)      | No data available           |
| Flammability (solid, gas)                       | 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.         |
| Partition coefficient n-octanol/water (Log Pow) | No data available           |
| Auto-ignition temperature                       | No data available           |
| Decomposition temperature                       | No data available           |
| Viscosity, kinematic                            | No data available           |
| Viscosity, dynamic                              | 36 – 53 Pa⋅s HN-0333        |
| Explosive limits                                | No data available           |
| Explosive properties                            | Product is not explosive.   |
| Oxidising properties                            | 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.

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| SECTION 11: Toxicological inform                       | nation  |
|--|---|
| 11.1. Information on toxicological effe                | ects  |
| Acute toxicity (oral)                                  | Not classified  |
| Acute toxicity (dermal)                                | Not classified  |
| Acute toxicity (inhalation)                            | Not classified  |
| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneo           | xymethylene)]bisoxirane (1675-54-3)                                     |
| LD50 dermal rat  | > 2000 mg/kg (Rat; Experimental value; OECD 402: Acute Dermal Toxicity) |
| Formaldehyde, oligomeric reaction products             | s 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.   |
|  | pH: 6.2   |
| Serious eye damage/irritation                          | Assumed to cause serious eye damage                                     |
|  | pH: 6.2   |
| Respiratory or skin sensitisation                      | May cause an allergic skin reaction.                                    |
| Germ cell mutagenicity                                 | Suspected of causing genetic defects.                                   |
| Carcinogenicity  | Not classified  |
| 2,2'-[(1-methylethylidene)bis(4,1-phenylened           | oxymethylene)]bisoxirane (1675-54-3)                                    |
| IARC group   | 3 - Not classifiable  |
| Quartz (SiO2)  |   |
| IARC group   | 1 - Carcinogenic to humans  |
| Reproductive toxicity                                  | May damage fertility  |
| STOT-single exposure                                   | Not classified  |
| STOT-repeated exposure                                 | Not classified  |
| Aspiration hazard                                      | Not classified  |
| Viscosity, kinematic                                   | No data available   |
| Potential adverse human health effects and<br>symptoms | No additional information available.                                    |
| Symptoms/effects after inhalation                      | May cause an allergic skin reaction.                                    |
| Symptoms/effects after skin contact                    | Causes skin irritation.   |
| Symptoms/effects after eye contact                     | Causes serious eye irritation.  |

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# **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - water

Toxic to aquatic life with long lasting effects.

| 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,<br>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,<br>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.                     |  |  |  |
| Quartz (SiO2)   |  |  |  |
| Persistence and degradability   | Biodegradability: not applicable.                      |  |  |
| Chemical oxygen demand (COD)  | hemical oxygen demand (COD) Not applicable (inorganic) |  |  |
| ThOD Not applicable (inorganic)   |  |  |  |

### 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) |  |  |
| Partition coefficient n-octanol/water (Log Pow)                                 | 3 (Estimated value, 25 °C)         |  |  |
| Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).        |                                    |  |  |
|   |                                    |  |  |
| Quartz (SiO2)   |                                    |  |  |
| Bioaccumulative potential   | No bioaccumulation data available. |  |  |

### 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)   |  |  |
| Partition coefficient n-octanol/water (Log Koc) 2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR) |  |  |
| Ecology - soil Low potential for adsorption in soil.                                    |  |  |

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| Quartz (SiO2)                   |                                     |  |  |
|---------------------------------|-------------------------------------|--|--|
| Ecology - soil                  | Low potential for mobility in soil. |  |  |
|                                 |                                     |  |  |
| 12.5. Other adverse effects     |                                     |  |  |
|                                 |                                     |  |  |
|                                 |                                     |  |  |
| Other information               | Avoid release to the environment.   |  |  |
| Other mormation                 | Avoid release to the environment.   |  |  |
| Other mormation                 | Avoid release to the environment.   |  |  |
|                                 |                                     |  |  |
|                                 |                                     |  |  |
| SECTION 13: Disposal considerat |                                     |  |  |
| SECTION 13: Disposal considerat |                                     |  |  |
| SECTION 13: Disposal considerat | ions                                |  |  |

# **SECTION 14: Transport information**

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

| ADR   | IMDG   | ΙΑΤΑ   | RID  |  |  |
|---|--|--|--|--|--|
| 14.1. UN number   |  |  |  |  |  |
| UN 1759   | UN 1759  | UN 1759  | UN 1759  |  |  |
| 14.2. UN proper shipping nam  | e  |  |  |  |  |
| CORROSIVE SOLID, N.O.S.<br>(trimethylolpropane triglycidylether)  | CORROSIVE SOLID, N.O.S. (trimethylolpropane triglycidylether)  | Corrosive solid, n.o.s.<br>(trimethylolpropane triglycidylether)   | CORROSIVE SOLID, N.O.S.<br>(trimethylolpropane triglycidylether)   |  |  |
| Transport document description  |  |  |  |  |  |
| UN 1759 CORROSIVE SOLID,<br>N.O.S. (trimethylolpropane<br>triglycidylether), 8, III, (E),<br>ENVIRONMENTALLY<br>HAZARDOUS | UN 1759 CORROSIVE SOLID,<br>N.O.S. (trimethylolpropane<br>triglycidylether), 8, III, MARINE<br>POLLUTANT/ENVIRONMENTALL<br>Y HAZARDOUS | UN 1759 Corrosive solid, n.o.s.<br>(trimethylolpropane<br>triglycidylether), 8, III,<br>ENVIRONMENTALLY<br>HAZARDOUS | UN 1759 CORROSIVE SOLID,<br>N.O.S. (trimethylolpropane<br>triglycidylether), 8, III,<br>ENVIRONMENTALLY<br>HAZARDOUS |  |  |
| 14.3. Transport hazard class(e  | 14.3. Transport hazard class(es)   |  |  |  |  |
| 8   | 8  | 8  | 8  |  |  |
|   |  |  | R R  |  |  |

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|  | T  |  |  |
|--|--|--|--|
| III                                    | Ш  | III                                    | III                                    |
| 14.5. Environmental hazards            |  |  |  |
| Dangerous for the environment :<br>Yes | Dangerous for the environment :<br>Yes<br>Marine pollutant : Yes | Dangerous for the environment :<br>Yes | Dangerous for the environment :<br>Yes |
| No supplementary information avail     | able   |  |  |
| 4.6. Special precautions for u         | ser  |  |  |
| Overland transport                     |  |  |  |
| Classification code (ADR)              | C10  |  |  |
| Special provisions (ADR)               | 274  |  |  |
| imited quantities (ADR)                | 5kg  | 5kg                                    |  |
| Packing instructions (ADR)             | P002, IBC08, LP02, R001  |  |  |
| lixed packing provisions (ADR)         | MP10   |  |  |
| ransport category (ADR)                | 3  |  |  |
| Drange plates                          | 80<br>1759   |  |  |
| unnel restriction code (ADR)           | E  |  |  |
| ransport 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  |  |  |

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

Not applicable

# **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

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

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| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5) |  |  |  |
|--|--|--|--|
| EPA TSCA Regulatory Flag   | XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule (40 CFR 711).   |  |  |
| Reaction products of hexane-1,6-diol with 2-(chloromethyl) (933999-84-9)                         |  |  |  |
| EPA TSCA Regulatory Flag   | <ul> <li>E - E - indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.</li> <li>P - P - indicates a commenced Premanufacture Notice (PMN) substance.</li> <li>S - S - indicates a substance that is identified in a final Significant New Use Rule.</li> </ul> |  |  |
| trimethylolpropane triglycidylether (30499-70-8)   |  |  |  |
| EPA TSCA Regulatory Flag   | XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).  |  |  |

### 15.2. International regulations

### CANADA

| 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane (1675-54-3)                  |  |  |
|--|--|--|
| Listed on the Canadian DSL (Domestic Substances List)  |  |  |
| Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol (9003-36-5) |  |  |
| Listed on the Canadian DSL (Domestic Substances List)  |  |  |
| Quartz (SiO2)  |  |  |
| Listed on the Canadian DSL (Domestic Substances List)  |  |  |

### **EU-Regulations**

#### National regulations

Quartz (SiO2) Listed on IARC (International Agency for Research on Cancer)

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## **SECTION 16: Other information**

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Revision date

05/11/2020

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| Full text of H-statements: |  |  |
|----------------------------|--|--|
| 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.              |  |
| H350                       | May cause cancer.                                  |  |
| H360                       | May damage fertility or the unborn child.          |  |
| H411                       | Toxic to aquatic life with long lasting effects.   |  |
| H412                       | Harmful to aquatic life with long lasting effects. |  |

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   |  |
| ΙΑΤΑ  | 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  |  |
| РВТ   | 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  |  |

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| NFPA health hazard | 3 - Materials that, under emergency conditions, can cause serious or permanent injury. |
|--------------------|--|
| NFPA fire hazard   | 1 - Materials that must be preheated before ignition can occur.                        |
| NFPA reactivity    | 0 - Material that in themselves are normally stable, even under fire conditions.       |

#### Indication of changes:

| Section | Changed item               | Change   | Comments |
|---------|----------------------------|----------|----------|
| 2.1     | GHS-US classification      | Added    |          |
| 2.2     | Hazard statements (GHS US) | Added    |          |
| 9       | рН                         | Added    |          |
| 14      | Transport information      | Modified |          |
| 16      | Additional information     | Added    |          |

### SDS\_US\_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.