

# FS-ONE MAX / CFS-FIL

## Safety Data Sheet

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

Revision date: 10/30/2024

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Supersedes: 11/3/2022

Version: 1.7

### SECTION 1: Identification

#### 1.1. Identification

Product form Mixture  
Trade name FS-ONE MAX / CFS-FIL  
Product code BU Fire Protection



#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture Firestop intumescent sealant  
Recommended use Adhesives, sealants

#### 1.3. Supplier

##### Supplier

Hilti, Inc.  
Legacy Tower, Suite 1000  
7250 Dallas Parkway  
US TX 75024 Plano  
USA  
T +1 9724035800  
1-800-879-8000 toll free, F +1 918 254 0522  
[us-sales@hilti.com](mailto:us-sales@hilti.com)

##### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
FL 9494 Schaan  
Liechtenstein  
T +423 234 2111  
[product.compliance-fire.protection@hilti.com](mailto:product.compliance-fire.protection@hilti.com)

#### 1.4. Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number)  
GBK/Infotrac ID 101022  
(USA domestic) 1 800 535 5053  
or international (001) 352 323 3500

### SECTION 2: Hazard(s) identification

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

##### GHS-US classification

Not classified

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labelling

No labelling applicable

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

No additional information available

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

Not applicable

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

| Name                       | Product identifier  | %       | GHS-US classification             |
|----------------------------|---------------------|---------|-----------------------------------|
| Quartz (SiO <sub>2</sub> ) | CAS-No.: 14808-60-7 | 2.5 – 5 | Carc. 1A, H350<br>STOT RE 1, H372 |

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   | Get medical advice/attention if you feel unwell. Allow affected person to breathe fresh air. Allow the victim to rest.                                                                                                                                                                 |
| First-aid measures after skin contact | Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.                                                                               |
| First-aid measures after eye contact  | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists. |
| First-aid measures after ingestion    | Get medical advice/attention if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.                                                                                                                                                              |

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

|                                                     |                                                                                          |
|-----------------------------------------------------|------------------------------------------------------------------------------------------|
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met.                        |
| Symptoms/effects                                    | Not expected to present a significant hazard under anticipated conditions of normal use. |

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

No additional information available

### SECTION 5: Fire-fighting measures

#### 5.1. Suitable (and unsuitable) extinguishing media

|                                |                                                      |
|--------------------------------|------------------------------------------------------|
| Suitable extinguishing media   | Water spray. Dry powder. Foam. Carbon dioxide. Sand. |
| Unsuitable extinguishing media | Do not use a heavy water stream.                     |

#### 5.2. Specific hazards arising from the chemical

|                                                  |                                  |
|--------------------------------------------------|----------------------------------|
| Hazardous decomposition products in case of fire | Carbon dioxide. Carbon monoxide. |
|--------------------------------------------------|----------------------------------|

#### 5.3. Special protective equipment and precautions for fire-fighters

|                                |                                                                                                                                                                     |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.     |

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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.  
Emergency procedures Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

#### 6.4. Reference to other sections

For further information refer to section 13. See Section 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.  
Hygiene measures Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep cool. Store in a dry place. Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.  
Incompatible products Strong bases. Strong acids.  
Incompatible materials Sources of ignition. Direct sunlight.  
Storage temperature 41 – 77 °F

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

|                                                   |                                                                                    |
|---------------------------------------------------|------------------------------------------------------------------------------------|
| <b>FS-ONE MAX / CFS-FIL</b>                       |                                                                                    |
| No additional information available               |                                                                                    |
| <b>Quartz (SiO<sub>2</sub>) (14808-60-7)</b>      |                                                                                    |
| <b>USA - ACGIH - Occupational Exposure Limits</b> |                                                                                    |
| Local name                                        | Silica crystalline - quartz                                                        |
| ACGIH OEL TWA                                     | 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 2023                                                                         |

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| Quartz (SiO <sub>2</sub> ) (14808-60-7)   |                                             |
|-------------------------------------------|---------------------------------------------|
| USA - OSHA - Occupational Exposure Limits |                                             |
| Local name                                | Silica, crystalline quartz, respirable dust |
| Remark (OSHA)                             | (3) See Table Z-3.                          |
| Regulatory reference (US-OSHA)            | OSHA Annotated Table Z-3 Mineral Dusts      |

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

No additional information available

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

#### Personal protective equipment:

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

| Hand protection:                                                                                                                                                    |                      |                   |                |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|----------------|-------------|
| Wear suitable gloves tested to EN374. Suitable for short-term work or as a splash guard:<br>Nitrile rubber gloves (> 0.1 mm). In case of permanent product contact: |                      |                   |                |             |
| Type                                                                                                                                                                | Material             | Permeation        | Thickness (mm) | Penetration |
| Disposable gloves                                                                                                                                                   | Nitrile rubber (NBR) | 6 (> 480 minutes) | >0,4           |             |
| Eye protection:                                                                                                                                                     |                      |                   |                |             |
| Chemical goggles or safety glasses                                                                                                                                  |                      |                   |                |             |
| Skin and body protection:                                                                                                                                           |                      |                   |                |             |
| Wear suitable protective clothing                                                                                                                                   |                      |                   |                |             |
| Respiratory protection:                                                                                                                                             |                      |                   |                |             |
| No respiratory protection needed under normal use conditions                                                                                                        |                      |                   |                |             |

#### 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

|                 |                |
|-----------------|----------------|
| Physical state  | Solid          |
| Appearance      | Pasty.         |
| Colour          | red            |
| Odour           | characteristic |
| Odour threshold | Not determined |
| pH              | ≈ 7.85         |
| Melting point   | Not applicable |

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|                                                 |                                |
|-------------------------------------------------|--------------------------------|
| Freezing point                                  | No data available              |
| Boiling point                                   | No data available              |
| Flash point                                     | Not applicable                 |
| Relative evaporation rate (butylacetate=1)      | No data available              |
| Flammability (solid, gas)                       | Not applicable. Non flammable. |
| Vapour pressure                                 | No data available              |
| Relative vapour density at 20°C                 | No data available              |
| Relative density                                | No data available              |
| Density                                         | ≈ 1.35 g/cm <sup>3</sup>       |
| Molecular mass                                  | Not determined                 |
| Solubility                                      | No data available              |
| 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                              | No data available              |
| Explosive limits                                | No data available              |
| Explosive properties                            | No data available              |
| Oxidising properties                            | No data available              |

### 9.2. Other information

|             |       |
|-------------|-------|
| VOC content | 9 g/l |
|-------------|-------|

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions. Not established.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). 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. 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               |
| Skin corrosion/irritation         | Not classified<br>pH: ≈ 7.85 |
| Serious eye damage/irritation     | Not classified<br>pH: ≈ 7.85 |
| Respiratory or skin sensitisation | Not classified               |

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Germ cell mutagenicity Not classified

Carcinogenicity Not classified

| Quartz (SiO <sub>2</sub> ) (14808-60-7)  |                            |
|------------------------------------------|----------------------------|
| IARC group                               | 1 - Carcinogenic to humans |
| National Toxicology Program (NTP) Status | Known Human Carcinogens    |

Reproductive toxicity Not classified

STOT-single exposure Not classified

STOT-repeated exposure Not classified

| Quartz (SiO <sub>2</sub> ) (14808-60-7) |                                                                 |
|-----------------------------------------|-----------------------------------------------------------------|
| STOT-repeated exposure                  | Causes damage to organs through prolonged or repeated exposure. |

Aspiration hazard Not classified

Viscosity, kinematic No data available

Potential adverse human health effects and symptoms Based on available data, the classification criteria are not met.

Symptoms/effects Not expected to present a significant hazard under anticipated conditions of normal use.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

| FS-ONE MAX / CFS-FIL                    |                                   |
|-----------------------------------------|-----------------------------------|
| Persistence and degradability           | Not established.                  |
| Quartz (SiO <sub>2</sub> ) (14808-60-7) |                                   |
| Not rapidly degradable                  |                                   |
| Persistence and degradability           | Biodegradability: not applicable. |
| Chemical oxygen demand (COD)            | Not applicable (inorganic)        |
| ThOD                                    | Not applicable (inorganic)        |

### 12.3. Bioaccumulative potential

| FS-ONE MAX / CFS-FIL                    |                                    |
|-----------------------------------------|------------------------------------|
| Bioaccumulative potential               | Not established.                   |
| Quartz (SiO <sub>2</sub> ) (14808-60-7) |                                    |
| Bioaccumulative potential               | No bioaccumulation data available. |

### 12.4. Mobility in soil

| Quartz (SiO <sub>2</sub> ) (14808-60-7) |                                     |
|-----------------------------------------|-------------------------------------|
| Surface tension                         | No data available in the literature |
| Ecology - soil                          | Low potential for mobility in soil. |

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### 12.5. Other adverse effects

Other information Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods Dispose in a safe manner in accordance with local/national regulations.  
 Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations.  
 Ecological information Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

| DOT                                     | TDG                               | IMDG                                                      | IATA                              |
|-----------------------------------------|-----------------------------------|-----------------------------------------------------------|-----------------------------------|
| <b>14.1. UN number</b>                  |                                   |                                                           |                                   |
| Not regulated for transport             |                                   |                                                           |                                   |
| <b>14.2. Proper Shipping Name</b>       |                                   |                                                           |                                   |
| Not applicable                          | Not applicable                    | Not applicable                                            | Not applicable                    |
| <b>14.3. Transport hazard class(es)</b> |                                   |                                                           |                                   |
| Not applicable                          | Not applicable                    | Not applicable                                            | Not applicable                    |
| <b>14.4. Packing group</b>              |                                   |                                                           |                                   |
| Not applicable                          | Not applicable                    | Not applicable                                            | Not applicable                    |
| <b>14.5. Environmental hazards</b>      |                                   |                                                           |                                   |
| Dangerous for the environment: No       | Dangerous for the environment: No | Dangerous for the environment: No<br>Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available  |                                   |                                                           |                                   |

### 14.6. Special precautions for user

**DOT**  
No data available

**TDG**  
No data available

**IMDG**  
No data available

**IATA**  
No data available

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

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

#### 15.2. International regulations

##### Quartz (SiO<sub>2</sub>) (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)  
Listed as carcinogen on NTP (National Toxicology Program)  
Listed on Thailand Existing Chemicals Inventory (DIW)

#### 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

10/30/2024

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

None.

#### Full text of H-statements

|      |                                                                 |
|------|-----------------------------------------------------------------|
| H350 | May cause cancer.                                               |
| H372 | Causes damage to organs through prolonged or repeated exposure. |

#### Abbreviations and acronyms

|         |                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------|
| CAS-No. | Chemical Abstract Service number                                                                |
| 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                                                                         |
| BLV     | Biological limit value                                                                          |
| BOD     | Biochemical oxygen demand (BOD)                                                                 |
| CLP     | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                     |
| DMEL    | Derived Minimal Effect level                                                                    |
| DNEL    | Derived-No Effect Level                                                                         |
| EC-No.  | European Community number                                                                       |
| EC50    | Median effective concentration                                                                  |



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| Abbreviations and acronyms |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| ED                         | Endocrine disrupting properties                                                                   |
| EN                         | European Standard                                                                                 |
| IARC                       | International Agency for Research on Cancer                                                       |
| IATA                       | International Air Transport Association                                                           |
| IMDG                       | International Maritime Dangerous Goods                                                            |
| IOELV                      | Indicative Occupational Exposure Limit Value                                                      |
| LC50                       | Median lethal concentration                                                                       |
| LD50                       | Median lethal dose                                                                                |
| LOAEL                      | Lowest Observed Adverse Effect Level                                                              |
| N.O.S.                     | Not Otherwise Specified                                                                           |
| NOAEC                      | No-Observed Adverse Effect Concentration                                                          |
| NOAEL                      | No-Observed Adverse Effect Level                                                                  |
| NOEC                       | No-Observed Effect Concentration                                                                  |
| vPvB                       | Very Persistent and Very Bioaccumulative                                                          |
| WGK                        | Water Hazard Class                                                                                |
| VOC                        | Volatile Organic Compounds                                                                        |
| SDS                        | Safety Data Sheet                                                                                 |
| RID                        | Regulations concerning the International Carriage of Dangerous Goods by Rail                      |
| REACH                      | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| PNEC                       | Predicted No-Effect Concentration                                                                 |
| PBT                        | Persistent Bioaccumulative Toxic                                                                  |
| OEL                        | Occupational Exposure Limit                                                                       |
| OECD                       | Organisation for Economic Co-operation and Development                                            |
| COD                        | Chemical oxygen demand (COD)                                                                      |
| ThOD                       | Theoretical oxygen demand (ThOD)                                                                  |
| TRGS                       | Technical Rules for Hazardous Substances                                                          |
| TLM                        | Median Tolerance Limit                                                                            |
| STP                        | Sewage treatment plant                                                                            |

NFPA health hazard

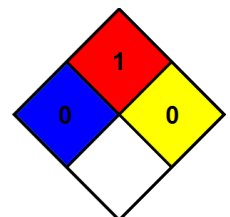
NFPA fire hazard

NFPA reactivity

0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.

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

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





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|                     |                                                                                                                                                                                   |
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| Hazard Rating       |                                                                                                                                                                                   |
| Health              | 0 Minimal Hazard - No significant risk to health                                                                                                                                  |
| Flammability        | 0 Minimal Hazard - Materials that will not burn                                                                                                                                   |
| Physical            | 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |
| Personal protection | B - Safety glasses, Gloves                                                                                                                                                        |

| Indication of changes: |              |        |                |
|------------------------|--------------|--------|----------------|
| Section                | Changed item | Change | Comments       |
|                        |              |        | general update |

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.