

# CFS-SP SIL

## Safety Data Sheet

According to SS 586 Part 3: 2014  
Issue date: 19.10.2022

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Version: 4.01

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

#### 1.1. Product identifier

Product form	Mixture
Trade name	CFS-SP SIL
Product code	BU Fire Protection

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Supplier's details

##### Supplier

Hilti Far East Private Ltd.  
80 Pasir Panjang Road  
#16-83/84 Mapletree Business City  
117372 Singapore - Singapur  
T +65 6777 7887 - F +65 6777 3057  
[sg-customerservice@hilti.com](mailto:sg-customerservice@hilti.com)

##### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
9494 Schaan - Liechtenstein  
T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

#### 1.5. Emergency telephone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +65 6777 7887
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### SECTION 2: Hazards identification

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

Physical hazards	Flammable liquids Not classified
Health hazards	Skin sensitisation, Category 1 Carcinogenicity, Category 1B

#### 2.2. Label elements

Hazard pictograms (GHS SG)



Signal word (GHS SG)

Danger

Hazard statements (GHS SG)

May cause an allergic skin reaction. (H317)  
May cause cancer. (H350)

Precautionary statements

Prevention

Avoid breathing mist, vapours. (P261)  
Wear eye protection, protective clothing, protective gloves. (P280)

Response

IF ON SKIN: Wash with plenty of water. (P302+P352)  
IF exposed or concerned: Get medical advice/attention. (P308+P313)  
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)

#### 2.3. Other hazards

No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Concentration (%)	Formula	Product identifier
Methyltris(1-methylpropylideneaminoxy)silane	1 – 2.5	C <sub>13</sub> H <sub>27</sub> N <sub>3</sub> O <sub>3</sub> Si	(CAS-No.) 22984-54-9 (EC-No.) 245-366-4
Vinyltris(methylethylketoxime)silane	0.1 – 1	C <sub>14</sub> H <sub>27</sub> N <sub>3</sub> O <sub>3</sub> Si	(CAS-No.) 2224-33-1 (EC-No.) 218-747-8
Butanone oxime	0.1 – 1	C <sub>4</sub> H <sub>9</sub> NO	(CAS-No.) 96-29-7 (EC-No.) 202-496-6 (EC Index-No.) 616-014-00-0

## 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).
Inhalation	Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
Skin contact	Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Take off contaminated clothing. Wash contaminated clothing before reuse.
Eye contact	Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
Ingestion	Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

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

### 5.2. Special hazards arising from the substance or mixture

No additional information available

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### 5.3. Special Protective actions for the 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	Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

No additional information available

#### 6.1.1. For non-emergency personnel

Emergency procedures	Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing spray, vapours. Evacuate unnecessary personnel.
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#### 6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable 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

Avoid release to the environment. 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	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

### 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	Ensure good ventilation of the work station. Avoid contact with skin and eyes. 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

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

Storage conditions	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.

### 7.3. Specific end use(s)

No additional information available



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Flammability (solid, gas)	≈ 435 °C
Vapour pressure	Not applicable, Non flammable.
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.3 g/cm <sup>3</sup>
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Viscosity, dynamic	No data available
Explosive properties	Product is not explosive.
Oxidising properties	No data available
Explosive limits	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

Vinyltris(methylethylketoxime)silane (2224-33-1)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Male, Experimental value, Oral)
LD50 dermal rat	> 2009 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)

Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)	
LD50 oral rat	2463 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))

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<b>Butanone oxime (96-29-7)</b>	
LD50 oral rat	2326 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	> 1000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.83 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))

Skin corrosion/irritation	Not classified pH: Not applicable.
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	May cause cancer.
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

<b>CFS-SP SIL</b>	
Density	1.3 g/cm <sup>3</sup>

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

## 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.
Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified
Other information	Avoid release to the environment.

<b>Vinyltris(methylethylketoxime)silane (2224-33-1)</b>	
LC50 - Fish [1]	843 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, GLP)
EC50 - Crustacea [1]	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
EC50 72h - Algae [1]	16 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	0.5 – 0.6 (Other, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	10.19 (Calculated, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.773 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

<b>Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)</b>	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Read-across, GLP)

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<b>Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)</b>	
EC50 - Crustacea [1]	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
ErC50 algae	16 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
BCF - Fish [1]	0.5 – 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.36 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
<b>Butanone oxime (96-29-7)</b>	
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, Nominal concentration)
EC50 - Crustacea [1]	201 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
ErC50 algae	11.8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Nominal concentration)
BCF - Fish [1]	0.5 – 5.8 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	0.63 (Experimental value, Equivalent or similar to OECD 117)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.55 (log Koc, SRC PCKOCWIN v2.0, QSAR)

### 12.2. Persistence and degradability

<b>CFS-SP SIL</b>	
Persistence and degradability	Not established.
<b>Vinyltris(methylethylketoxime)silane (2224-33-1)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>Butanone oxime (96-29-7)</b>	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable.

### 12.3. Bioaccumulative potential

<b>CFS-SP SIL</b>	
Bioaccumulative potential	Not established.
<b>Vinyltris(methylethylketoxime)silane (2224-33-1)</b>	
BCF - Fish [1]	0.5 – 0.6 (Other, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	10.19 (Calculated, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.773 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)</b>	
BCF - Fish [1]	0.5 – 5.8 (6 week(s), Cyprinus carpio, Flow-through system, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.36 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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Butanone oxime (96-29-7)	
BCF - Fish [1]	0.5 – 5.8 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value, GLP)
Partition coefficient n-octanol/water (Log Pow)	0.63 (Experimental value, Equivalent or similar to OECD 117)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.55 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

CFS-SP SIL	
Mobility in soil	No additional information available
Vinyltris(methylethylketoxime)silane (2224-33-1)	
Partition coefficient n-octanol/water (Log Pow)	10.19 (Calculated, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.773 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.
Methyltris(1-methylpropylideneaminoxy)silane (22984-54-9)	
Partition coefficient n-octanol/water (Log Pow)	0.36 (Experimental value)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Adsorbs into the soil.
Butanone oxime (96-29-7)	
Surface tension	30.29 mN/m (16 °C)
Partition coefficient n-octanol/water (Log Pow)	0.63 (Experimental value, Equivalent or similar to OECD 117)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.55 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

### 12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

## SECTION 13: Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)			
Not applicable	Not applicable	Not applicable	Not applicable



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ADR	IMDG	IATA	RID
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available			

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Rail transport

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. National regulations

No additional information available

### 15.2. International Regulations

No additional information available

### 15.3. Chemical inventory status

Australia AICS	No
Canada DSL	No
Canada NDSL	No
China IECSC	No
EU EINECS	No
EU ELINCS	No
EU NLP	No
Korea ECL	No
US TSCA	No

## SECTION 16: Other information

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.

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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.*