

Safety Data Sheet

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

SECTION 1: Identification

1.1. Identification

Product form Mixture

Product name CFS-S SIL SL / CFS-S SIL GG

Product code BU Fire Protection



1.2. Recommended use and restrictions on use

Use of the substance/mixture Firestop silcone sealant

1.3. Supplier

Supplier

Hilti, Inc.

Legacy Tower, Suite 1000 7250 Dallas Parkway Plano, TX 75024

USA

T+1 9724035800

1-800-879-8000 toll free - F +1 918 254 0522

Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100 Schaan, 9494 Liechtenstein T +423 234 2111

Version: 3.3

chemicals.hse@hilti.com

1.4. Emergency telephone number

Emergency number Chem-Trec

Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)

Tel.: 703 527 3887 (Other countries)

+1 918 8723000 1-800-879-8000 toll free

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin sensitisation, Category 1 H317 May cause an allergic skin reaction.

Reproductive toxicity, Category 2 H361 Suspected of damaging fertility or the unborn child.

Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)





Signal word (GHS US)

Hazard statements (GHS US)

Precautionary statements (GHS US)

Warning

H317 - May cause an allergic skin reaction.

H361 - Suspected of damaging fertility or the unborn child.

P261 - Avoid breathing vapours.

P280 - Wear protective gloves, protective clothing, eye protection.

09/26/2022 US-OSHA - en Page 1



Safety Data Sheet

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

P302+P352 - If on skin: Wash with plenty of water.

P308+P313 - If exposed or concerned: Get medical advice/attention.

2.3. Other hazards which do not result in classification

Other hazards which do not result in classification

In use the product releases 2-butanone oxime (methyl ethyl ketoxime; MEKO) (0-24h: <0.2%/h &

24-48h: <0.02%/h) which vaporises.

In cases of prolonged exposure MEKO may damage nasal membranes. If MEKO is inhaled in

large quantities over prolonged periods of time there may be irreversible damage to health: H351: Suspected of causing cancer.

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
Methyltris(1-methylpropylideneaminooxy)silane	CAS-No.: 22984-54-9	2.5 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Titanium dioxide	CAS-No.: 13463-67-7	1 – 2.5	Carc. 2, H351
octamethylcyclotetrasiloxane	CAS-No.: 556-67-2	0.1 – 1	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 4, H413

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 IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if

you feel unwell.

First-aid measures after skin contact Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs:

Get medical advice/attention.

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.

First-aid measures after ingestion Call a poison center or a doctor if you feel unwell.

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

Potential adverse human health effects and

Based on available data, the classification criteria are not met.

symptoms

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

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

09/26/2022 US-OSHA - en 2/11



Safety Data Sheet

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

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

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

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting Self-contained breathing apparatus. Complete protective clothing. Do not attempt to take action

without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing vapours.

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".

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Mechanically recover the product. Notify authorities if product enters sewers or public waters.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Wear personal protective equipment. Obtain special

instructions before use. Do not handle until all safety precautions have been read and

understood. Avoid contact with skin and eyes. Avoid breathing vapours.

Hygiene measures Wash contaminated clothing before reuse. 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Store in a dry place. Store locked up. Store in a well-ventilated place.

Incompatible products Strong bases. Strong acids.
Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 35 – 104 °F

09/26/2022 US-OSHA - en 3/11



Safety Data Sheet

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

CFS-S SIL SL / CFS-S SIL GG

No additional information available

Methyltris(1-methylpropylideneaminooxy)silane (22984-54-9)

No additional information available

Titanium dioxide (13463-67-7)

Local name

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA	0.2 mg/m³ (Respirable fraction) 2.5 mg/m³ (Respirable fraction)
Remark (ACGIH)	LRT irr; A3
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Titanium dioxide (Total dust)
OSHA PEL TWA [1]	15 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

octamethylcyclotetrasiloxane (556-67-2)

No additional information available

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

for this product.

Titanium dioxide

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:

Protective clothing. Safety glasses. Gloves.

protective gloves. EN 374

Туре	Material	Permeation	Thickness (mm)	Penetration
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4	

Eye protection:

EN 166

211 100		
Туре	Field of application	Characteristics
Safety glasses		

09/26/2022 US-OSHA - en 4/11



Safety Data Sheet

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

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

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 Liquid
Appearance Pasty.
Colour red white
Odour odourless
Odour threshold Not determined

pH 8.5

Melting pointNot applicableFreezing pointNo data availableBoiling pointNo data available

Flash point 412 °F

Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) Not applicable. Vapour pressure No data available Relative vapour density at 20 °C No data available Relative density No data available Density 1.38 g/cm³ 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

9.2. Other information

Oxidising properties

VOC content < 50 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

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

09/26/2022 US-OSHA - en 5/11

No data available



Safety Data Sheet

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

IARC group

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

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.

SECTION 11: Toxicological information

11.1.	Information	on	toxicological	effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

Not classified

Acute toxicity (innalation)	NOT Classified
Methyltris(1-methylpropylideneaminoo	xy)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))
Titanium dioxide (13463-67-7)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
octamethylcyclotetrasiloxane (556-67-2	2)
LD50 oral rat	> 4800 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 dermal rat	> 2400 mg/kg bodyweight (Equivalent or similar to OECD 402, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	36 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
Skin corrosion/irritation	Not classified pH: 8.5
Serious eye damage/irritation	Not classified pH: 8.5
Respiratory or skin sensitisation	May cause an allergic skin reaction.
O a mare a a 11 mare de anoma la le c	Not classified
Germ cell mutagenicity	

09/26/2022 US-OSHA - en 6/11

2B - Possibly carcinogenic to humans



Safety Data Sheet

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

Reproductive toxicity Suspected of damaging fertility or the unborn child.

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

symptoms

Based on available data, the classification criteria are not met.

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

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.

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

Methyltris(1-methylpropylideneaminooxy)silane (22984-54-9)		
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Read-across, GLP)	
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)	
Titanium dioxide (13463-67-7)		
LC50 - Fish [1]	> 1000 mg/l (Pisces, Fresh water)	
LC50 - Other aquatic organisms [1]	> 500 mg/l	
EC50 - Crustacea [1]	> 1000 mg/l (Invertebrata, Fresh water)	
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)	

12.2. Persistence and degradability

CFS-S SIL SL / CFS-S SIL GG		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Methyltris(1-methylpropylideneaminooxy)silane (22984-54-9)		
Persistence and degradability	Not readily biodegradable in water.	
Titanium dioxide (13463-67-7)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	

09/26/2022 US-OSHA - en 7/11



Safety Data Sheet

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

octamethylcyclotetrasiloxane (556-67-2)	
Persistence and degradability	Not readily biodegradable in water.

12.3. Bioaccumulative potential

12.3. Bloaccumulative potential		
CFS-S SIL SL / CFS-S SIL GG		
Bioaccumulative potential	Not established.	
Methyltris(1-methylpropylideneaminooxy)silane (22984-54-9)		
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)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Titanium dioxide (13463-67-7)		
Bioaccumulative potential	Not bioaccumulative.	
octamethylcyclotetrasiloxane (556-67-2)		
BCF - Fish [1]	12400 l/kg (EPA OTS 797.1520, 28 day(s), Pimephales promelas, Flow-through system, Fresh water, Experimental value, GLP)	
Partition coefficient n-octanol/water (Log Pow)	6.488 (Experimental value, OECD 123: Partition Coefficient (1-Octanol/Water): Slow-Stirring Method, 25.1 °C)	
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).	

12.4. Mobility in soil

Methyltris(1-methylpropylideneaminooxy)silane (22984-54-9)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	5.481 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Adsorbs into the soil.	
Titanium dioxide (13463-67-7)		
Surface tension	No data available in the literature	
Ecology - soil	Low potential for mobility in soil.	
octamethylcyclotetrasiloxane (556-67-2)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.22 (log Koc, OECD 106: Adsorption/Desorption Using a Batch Equilibrium Method, Experimental value, GLP)	
Ecology - soil	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

Waste treatment methods Dispose of contents/container in accordance with licensed collector's sorting instructions.

09/26/2022 US-OSHA - en 8/11



Safety Data Sheet

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

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.

Ecology - waste materials Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID			
14.1. UN 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			
14.4. Packing group						
Not applicable	Not applicable	Not applicable	Not applicable			
14.5. Environmental hazards						
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No			
No supplementary information available						

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport

No data available

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 present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

09/26/2022 US-OSHA - en 9/11



Safety Data Sheet

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

octamethylcyclotetrasiloxane	CAS-No. 556-67-2	0.1 – 1%

15.2. International regulations

Titanium dioxide (13463-67-7)

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 09/26/2022

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		
H226	Flammable liquid and vapour.	
H227	Combustible liquid	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H351	Suspected of causing cancer.	
H361	Suspected of damaging fertility or the unborn child.	
H413	May cause long lasting harmful effects to aquatic life.	

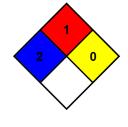
NFPA health hazard

2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard NFPA reactivity

- 1 Materials that must be preheated before ignition can occur.
- $\ensuremath{\text{0}}$ Material that in themselves are normally stable, even under fire

conditions.



Hazard Rating

Health 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

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

09/26/2022 US-OSHA - en 10/11



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

Indication of changes:					
Section	Changed item	Change	Comments		
			general update		

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.

09/26/2022 US-OSHA - en 11/11