

Safety Data Sheet

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

Issue date: 13/12/2021 Supersedes: 29/03/2019 Revision date: 13/12/2021 Version: 4.0

SECTION 1: Identification

GHS Product identifier

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

Other means of identification

No additional information available

Recommended use of the chemical and restrictions on use

Use of the substance/mixture Firestop silicone joint spray

Supplier's details

Department issuing data specification sheet Supplier

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1.5. **Emergency phone number**

Emergency number Schweizerisches Toxikologisches Informationszentrum - 24h Service

+41 44 251 51 51 (international)

+62 21 789 0850

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Flammable liquids Not classified On basis of test data Skin corrosion/irritation Not classified Expert judgment H317 Skin sensitisation. Category 1 Calculation method H350 Calculation method Carcinogenicity, Category 1B

Full text of H-statements: see section 16

Adverse physicochemical, human health and May cause an allergic skin reaction.

environmental effects

GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)





GHS07

Danger

Signal word (GHS UN)

Hazardous ingredients Vinyltris(methylethylketoxime)silane, Methyltris(1-methylpropylideneaminooxy)silane,

Butanone oxime



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Hazard statements (GHS UN) H317 - May cause an allergic skin reaction

H350 - May cause cancer

Precautionary statements (GHS UN) P261 - Avoid breathing mist, spray.

P280 - Wear protective gloves, protective clothing, Safety glasses.

P302+P352 - IF ON SKIN: Wash with plenty of water/...

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P308+P313 - IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|---|----------------------|---------|--|
| Methyltris(1-methylpropylideneaminooxy)silane | (CAS-No.) 22984-54-9 | 1 – 2,5 | Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 2A, H319 Skin sensitisation, Category 1, H317 |
| Vinyltris(methylethylketoxime)silane | (CAS-No.) 2224-33-1 | 0,1 – 1 | Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Specific target organ toxicity — Repeated exposure, Category 2, H373 |
| Butanone oxime | (CAS-No.) 96-29-7 | 0,1 – 1 | Acute toxicity (oral), Category 3, H301 Acute toxicity (dermal), Category 4, H312 Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Skin sensitisation, Category 1, H317 Carcinogenicity, Category 1B, H350 Specific target organ toxicity — single exposure, Category 1, H370 Specific target organ toxicity — Single exposure, Category 3, Narcosis, H336 Specific target organ toxicity — Repeated exposure, Category 2, H373 |

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

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.

First-aid measures after eye contact

Rinse eyes with water as a precaution. Rinse immediately with plenty of water. Obtain

medical attention if pain, blinking or redness persists.

First-aid measures after ingestion Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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4.2. Most important symptoms/effects, acute and delayed

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

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

Potential adverse human health effects and

symptoms

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

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable 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. Specific hazards arising from the chemical

No additional information available

5.3. Special protective actions 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 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

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.

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 materials 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.

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.

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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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

relevant for this product.

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

Environmental exposure controls Avoid release to the environment.

Other information Do not eat, drink or smoke during use.

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

Hand protection Protective gloves. Wear protective gloves.

| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|------------|----------------|-------------|------------|
| Disposable gloves | Nitrile rubber (NBR) | | | | EN ISO 374 |

Eye protection Chemical goggles or safety glasses

| Туре | Field of application | Characteristics | Standard |
|----------------|----------------------|-----------------|----------------|
| Safety glasses | | | EN 166, EN 170 |

Skin and body protection Wear suitable protective clothing

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. In order to avoid

inhalation of mist/vapour, all spraying must be done wearing adequate respirator. Wear

appropriate mask

| Device | Filter type | Condition | Standard |
|--------|--|-----------|----------|
| | Type A - High-boiling (>65 °C) organic compounds | | |

Personal protective equipment symbol(s)









8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state Liquid
Appearance Pasty

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Colour white.

Odour characteristic.

Odour threshold Not available

Melting point Not applicable

Freezing point Not available

Boiling point > 35 °C

Flammability (solid, gas) ≈ 435 °C

Not applicable, Non flammable.

Explosive limits

Not available

Lower explosive limit (LEL)

Not available

Upper explosive limit (UEL)

Not available

Flash point > 93 °C Not applicable.

Auto-ignition temperature Not available Decomposition temperature Not available рΗ Not applicable. pH solution Not available Viscosity, kinematic (calculated value) (40 °C) Not available Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50 °C Not available 1,3 g/cm³ Density Relative density Not available Relative vapour density at 20 °C Not available

Solubility insoluble in water.

Explosive properties Product is not explosive

Particle size Not applicable
Particle size distribution Not applicable
Particle shape Not applicable
Particle aspect ratio Not applicable
Particle specific surface area Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

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.



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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)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

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-methylpropylideneaminooxy)sila | nne (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)) | | | |
| Butanone oxime (96-29-7) | | | | |
| 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

pH: Not applicable.

Respiratory or skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT-single exposure

STOT-repeated exposure

Not classified

Not classified

Not classified

Not classified

Potential adverse human health effects and

symptoms

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

SECTION 12: Ecological information

12.1. Toxicity

Aspiration hazard

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

Not classified

Hazardous to the aquatic environment, long-term

(chronic)

Not classified

| Vinyltris(methylethylketoxime)silane (2224-33-1) | |
|--|--|
| LC50 - Fish [1] | 843 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Static system, Fresh water. Experimental value, GLP) |
| | water, Experimental value, GEF) |

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| 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) | | | |
| 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) | | | |
| Butanone oxime (96-29-7) | | | | |
| 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) | | | |

12.2. Persistence and degradability

| CFS-SP SIL | | | |
|--|---|--|--|
| Persistence and degradability | Not established. | | |
| | | | |
| Vinyltris(methylethylketoxime)silane (2224-33-1) | | | |
| Persistence and degradability | Not readily biodegradable in water. | | |
| Methyltris(1-methylpropylideneaminooxy)silane (2 | 22984-54-9) | | |
| Persistence and degradability | Not readily biodegradable in water. | | |
| Butanone oxime (96-29-7) | | | |
| Persistence and degradability | Not readily biodegradable in water. Inherently biodegradable. | | |

12.3. Bioaccumulative potential

| CFS-SP SIL | | | |
|--|--|--|--|
| Bioaccumulative potential | Not established. | | |
| | | | |
| | | | |
| Vinyltris(methylethylketoxime)silane (2224-33-1) | | | |
| 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 Kow) | 10,19 (Calculated, KOWWIN) | | |
| Bioaccumulative potential Low potential for bioaccumulation (BCF < 500). | | | |
| 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 Kow) | 0,36 (Experimental value) | | |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). | | |
| 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 Kow) | octanol/water (Log Kow) 0,63 (Experimental value, Equivalent or similar to OECD 117) | | |
| Bioaccumulative potential Low potential for bioaccumulation (BCF < 500). | | | |

12.4. Mobility in soil

| CFS-SP SIL | |
|------------------|-------------------------------------|
| Mobility in soil | No additional information available |
| | |

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| Vinyltris(methylethylketoxime)silane (2224-33-1) | | | | |
|---|--|--|--|--|
| 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-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. | | | |
| Butanone oxime (96-29-7) | | | | |
| Surface tension | 30,29 mN/m (16 °C) | | | |
| 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

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.

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 or ID number | er | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | | | |
| 14.2. UN proper shipping nam | пе | | | | | |
| 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 | 14.4. Packing group | | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | | | |
| 14.5. Environmental hazards | | | | | | |
| 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



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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. Safety, health and environmental regulations specific for the product in question

No additional information available

SECTION 16: Other information

 SDS Major/Minor
 None

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 29/03/2019

Other information None.

| Full text of H-statements: | |
|----------------------------|---|
| H225 | Highly flammable liquid and vapour |
| H301 | Toxic if swallowed |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H336 | May cause drowsiness or dizziness |
| H350 | May cause cancer |
| H370 | Causes damage to organs |
| H373 | May cause damage to organs through prolonged or repeated exposure |
| H412 | Harmful to aquatic life with long lasting effects |

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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.