

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 12/11/2024 Revision date: 12/11/2024 Supersedes: 15/11/2022 Version: 7.5

SECTION 1: Identification

1.1. GHS Product identifier

Product form Mixture

Product name CFS-S SIL / CP 601S

Type of product Sealants

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

Recommended use Adhesives, sealants

1.4. Supplier's details

Supplier

Hilti (Hong Kong) Ltd.

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HK Kowloon
Hong Kong
T +852 27734 7

T +852 27734 700 hksales@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

1.5. Emergency phone number

Emergency number

Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+852 27734 700

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Not classified

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

No labelling applicable

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification

Product hydrolyses under formation of methanol (CAS no. 67-56-1). Methanol is toxic by inhalation, in contact with skin and if swallowed. Methanol causes damage to organs. Methanol is highly flammable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|--|---------------------|-----|---|
| diisobutoxy-bisethylacetoacetatotitanate | CAS-No.: 83877-91-2 | < 2 | Flammable liquids, Category 3, H226 Acute toxicity (oral) Not classified Skin corrosion/irritation, Category 2, H315 Serious eye damage/eye irritation, Category 1, H318 Specific target organ toxicity — Single exposure, Category 3, Narcosis, H336 Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation, H335 Hazardous to the aquatic environment — Acute Hazard Not classified |

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 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 Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. If skin irritation 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. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion Drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

Rinse mouth. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

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

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

symptoms

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

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure. Further toxicology information in section 11 must be observed.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media Water spray. Carbon dioxide. dry chemical powder, alcohol-resistant foam, carbon dioxide

(CO2). Sand. Foam. Dry powder. Do not use a heavy water stream.

Unsuitable extinguishing media Do not use a heavy water stream

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5.2. Specific hazards arising from the chemical

Reactivity in case of fire Formation of toxic gases is possible during heating or in case of fire. Decomposition

products may be a hazard to health.

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

5.3. Special protective actions 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 enter fire area

without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment Wear recommended personal protective equipment.

Emergency procedures Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Do not

touch or walk on the spilled product. 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

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

For containment Absorb spilled material with sand or earth. Collect spillage.

Methods for cleaning up Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Clean contaminated surfaces with an excess of water. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

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 5-25 °C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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8.2. Appropriate engineering controls

Environmental exposure controls Avoid release to the environment.

Other information Do not eat, drink or smoke when using this product. Do not eat, drink or smoke during use.

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

Personal protective equipment:

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

Hand protection Protective gloves. ISO 374-1. The permeation time is not the maximum wearing time!

Generally speaking, it must be reduced. Contact with either mixtures of substances or different substances may shorten the protective function's effective duration. Wear

protective gloves.

| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-------------------|----------------------|-------------------|----------------|-------------|------------|
| Disposable gloves | Butyl rubber | 6 (> 480 minutes) | >0.3 | | EN ISO 374 |
| | Nitrile rubber (NBR) | 1 (> 10 minutes) | >0.4 | | 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 No respiratory protection needed under normal use conditions. Where exposure through

inhalation may occur from use, respiratory protection equipment is recommended. Wear

appropriate mask

| Device | Filter type | Condition | Standard |
|----------------|-------------|-----------|----------|
| Full face mask | ABEK | | EN 136 |

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

Colour Various colours.

Odour slight. Odour threshold Not determined Melting point Not available Freezing point Not available Boiling point Not available Flammability Not available Lower explosion limit Not available Upper explosion limit Not available Flash point Pasty; Not relevant

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Vapour pressure at 50°C

according to the United Nations GHS (Rev. 9, 2021)

Density 1.5 – 1.54 g/cm³ 23°C, 1013hPa (ISO 1183-1 A)

Not available

Relative density

Relative vapour density at 20°C

Solubility

Not available

Not available

insoluble in water.

Viscosity, dynamic > 1000000 mPa·s (Brookfield)

Particle size Not applicable

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

Molecular mass Not determined

Additional information Explosion limits for released methanol: 5.5 - 44%(V)

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

Reacts with: water, basic substances and acids. Reaction causes the formation of: methanol.

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

Additional information Based on available data, the classification criteria are not met

| 01 0-0 01L7 01 0010 | CFS-S | SIL/ | СР | 601S |
|---------------------|-------|------|----|------|
|---------------------|-------|------|----|------|

LD50 oral rat > 2000 mg/kg

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

LD50 oral rat > 5000 mg/kg bodyweight (Rat, Oral)

Skin corrosion/irritation Not classified

Based on available data, the classification criteria are not met

pH: ≈ Not applicable

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Serious eye damage/irritation Not classified (Based on available data, the classification criteria are not met) (Based on

available data, the classification criteria are not met)

pH: ≈ Not applicable

Respiratory or skin sensitisation Not classified

Based on available data, the classification criteria are not met

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

Germ cell mutagenicity

Carcinogenicity

Reproductive toxicity

STOT-single exposure

Not classified

Not classified

Not classified

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

STOT-single exposure May cause drowsiness or dizziness. May cause respiratory irritation.

STOT-repeated exposure Not classified
Aspiration hazard Not classified

Potential adverse human health effects and

symptoms

Other information Hydrolysis product / impurity: Methanol (CAS 67-56-1) is readily and rapidly absorbed at all

exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may

be a delay in the onset of these effects after exposure.

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

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

EC50 - Crustacea [1] > 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Reaction product)

Static System, Fresh water, Experimental value, Reaction product

12.2. Persistence and degradability

CFS-S SIL / CP 601S

Persistence and degradability

Polymer component. biologically not degradable. Elimination by adsorption to activated sludge. The product of hydrolysis (methanol) is readily biodegradable.

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

Persistence and degradability Biodegradability: not applicable.

12.3. Bioaccumulative potential

CFS-S SIL / CP 601S

Bioaccumulative potential Polymer component. No bioaccumulation expected.

diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

Bioaccumulative potential Bioaccumulation: not applicable.

12.4. Mobility in soil

CFS-S SIL / CP 601S

Mobility in soil No additional information available

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diisobutoxy-bisethylacetoacetatotitanate (83877-91-2)

Ecology - soil No (test)data on mobility of the substance available.

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.

Ecological information 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 | | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | |
| 14.2. UN proper shipping nam | е | | | |
| Not applicable | Not applicable | Not applicable | Not applicable | |
| 14.3. Transport hazard class(e | 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 availa | able | | | |

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. Maritime transport in bulk according to IMO instruments

Not applicable

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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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 11/12/2024

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 Supersedes
 11/15/2022

Other information None.

| Full text of H-statements: | |
|----------------------------------|--|
| Acute Tox. Not classified (Oral) | Acute toxicity (oral) Not classified |
| Aquatic Acute Not classified | Hazardous to the aquatic environment – Acute Hazard Not classified |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Narcosis |
| STOT SE 3 | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H226 | Flammable liquid and vapour |
| H315 | Causes skin irritation |
| H318 | Causes serious eye damage |
| H335 | May cause respiratory irritation |
| H336 | May cause drowsiness or dizziness |

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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.

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