

CFS-S SIL / CP 601S Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021) Issue date: 12/11/2024 Revision date: 12/11/2024

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Version: 7.5

SECTION 1: Identification

1.1. GHS Product identifier Product form Product name Type of product

Product code

Mixture CFS-S SIL / CP 601S Sealants 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 Qatar W.L.L. Souq Al Rawda Salwa Road P.O. Box 24097 QA Doha Ad Dawḩah Qatar T +974 4406 3600, F +974 4406 3669 QA.info@hilti.com

1.5. Emergency phone number

Emergency number

Department issuing data specification sheet Hilti AG Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-fire.protection@hilti.com

Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

+974 4406 3600

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.



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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

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 mea | asures |
| 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, ac | ute and delayed |
| Symptoms/effects | Not expected to present a significant hazard under anticipated conditions of normal use. |
| 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

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.



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| 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. | | |
| Unsuitable extinguishing media | Do not use a heavy water stream. | | |
| 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-fighte | rs | | |
| 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. | | |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| 6.1.1. For non-emergency personnel | |
|--|---|
| Protective equipment Emergency procedures | Wear recommended personal protective equipment. 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 a | ny 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 |



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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

Environmental exposure controls Other information Avoid release to the environment.

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 |
|-----------------|
| Appearance |
| Colour |
| Odour |
| Odour threshold |
| Melting point |
| Freezing point |

Liquid Pasty Various colours. slight. Not determined Not available Not available



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| Boiling point | Not available | |
|---|---|--|
| Flammability | Not available | |
| Lower explosion limit | Not available | |
| Upper explosion limit | Not available | |
| Flash point | Pasty; Not relevant | |
| Auto-ignition temperature | > 400 °C (DIN 51794) | |
| Decomposition temperature | > 300 °C (Lit) | |
| pH | ≈ 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 | |
| Density | 1.5 – 1.54 g/cm³ 23°C, 1013hPa (ISO 1183-1 A) | |
| Relative density | Not available | |
| Relative vapour density at 20°C | Not available | |
| Solubility | insoluble in water. | |
| Viscosity, dynamic | > 1000000 mPa·s (Brookfield) | |
| Particle size | Not applicable | |
| 0.2 Data relevant with regard to physical bazard classes (supplemental) | | |

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

Molecular mass Additional information Not determined 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) | Not classified | | |
| Acute toxicity (dermal) | Not classified | | |
| Acute toxicity (inhalation) | Not classified | Not classified | |
| Additional information | Based on available data, the classification criteria are not met | | |
| CFS-S SIL / CP 601S | | | |
| LD50 oral rat | > 2000 mg/kg | | |
| diisobutoxy-bisethylacetoacetatotitanate (83877-91-2) | | | |
| LD50 oral rat | > 5000 mg/kg bodyweight (Rat, Oral) | | |
| 12/11/2024 | EN (English) | 5/8 | |



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| Skin corrosion/irritation | Not classified |
|-----------------------------------|---|
| | Based on available data, the classification criteria are not met |
| | pH: ≈ Not applicable |
| 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 |
| Germ cell mutagenicity | Not classified |
| Carcinogenicity | Not classified |
| Reproductive toxicity | Not classified |
| STOT-single exposure | 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 | Based on available data, the classification criteria are not met. | |
| 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 (8 | 3877-91-2) | |
| 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) | |
| 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 (8 | 3877-91-2) | |
| Persistence and degradability | Biodegradability: not applicable. | |
| 12.3. Bioaccumulative potential | | |
| CFS-S SIL / CP 601S | | |
| Bioaccumulative potential | Polymer component. No bioaccumulation expected. | |
| diisobutoxy-bisethylacetoacetatotitanate (8 | 3877-91-2) | |
| Bioaccumulative potential | Bioaccumulation: not applicable. | |



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| 12.4. Mobility in soil | | | |
|---|---|--|--|
| CFS-S SIL / CP 601S | | | |
| Mobility in soil | No additional information available | | |
| 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 Product/Packaging disposal recommendations Ecological information Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

SECTION 14: Transport information

| ADR | IMDG | ΙΑΤΑ | RID |
|-----------------------------------|---|-----------------------------------|-----------------------------------|
| 14.1. UN number or ID number | r | | |
| Not applicable | Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping nam | e | | |
| 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 |

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport



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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 | |
| Issue date | 11/12/2024 | |
| Revision date | 11/12/2024 | |
| 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 | |
| Н335 | May cause respiratory irritation | |
| Н336 | 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.