

# CFS-S SIL / CP 601S

## Safety Data Sheet

According to ICOP 2014

Issue date: 12/11/2024

Revision date: 12/11/2024

Supersedes: 15/11/2022

Version: 7.3

### SECTION 1: Identification of the hazardous chemical and of the supplier

#### 1.1. Product identifier

Name CFS-S SIL / CP 601S



#### 1.2. Other means of identification

Product code BU Fire Protection

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

Recommended use Adhesives, sealants

#### 1.4. Supplier details

##### Supplier

Hilti (Malaysia) Sdn. Bhd.  
F-5-A, Sime Darby Brunfield Tower, No. 2, Jalan PJU 1A/7A  
Oasis Square, Oasis Damansara  
47301 Petaling Jaya, Selangor  
Malaysia  
T +60 3 5628 7222  
1800 880 985 toll free - F +60 3 7848 7399

##### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
9494 Schaan  
Liechtenstein  
T +423 234 2111  
[product.compliance-fire.protection@hilti.com](mailto:product.compliance-fire.protection@hilti.com)

#### 1.5. Emergency phone number

Emergency number GBK GmbH Global Regulatory Compliance  
+49 (0)6132-84463

Country	Organisation/Company	Address	Emergency number	Comment
Malaysia	Malaysia National Poison Centre (NPC) Universiti Sains Malaysia	11800 Penang	+60 (0)4 6536 999 (Mon-Fri 8am-10pm; Sat, Sun & Public Holiday 8am-5pm)	

### SECTION 2: Hazards identification

#### 2.1. Classification of the hazardous chemical

Classification according to Industry Code of Practice on chemicals classification and hazard communication (2019)

Not classified

#### 2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2019)

No labelling applicable

#### 2.3. Other hazards that do not result in classification

Other hazards which do not result in 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 and information of the ingredients of the hazardous chemical

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%
diisobutoxy-bisethylacetoacetatitanate	CAS-No.: 83877-91-2	< 2

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

Other medical advice or treatment	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 (CO <sub>2</sub> ). Sand. Foam. Dry powder.
Unsuitable extinguishing media	Do not use a heavy water stream.

### 5.2. Physicochemical 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 equipment and precautions 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	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.

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### 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 and personal protection

### 8.1. Control parameters

No additional information available

#### Exposure limit values for the other components

Additional information

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

#### 8.1.1 Biological monitoring

No additional information available

### 8.2. Appropriate engineering controls

No additional information available

### 8.3. Individual protection measures, such as PPE

#### 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.

Type	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

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<b>Eye protection:</b>			
Chemical goggles or safety glasses			
Type	Field of application	Characteristics	Standard
Safety glasses			EN 166, EN 170

<b>Skin and body protection:</b>
Wear suitable protective clothing

<b>Respiratory protection:</b>			
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):**



Environmental exposure controls

Avoid release to the environment.

### SECTION 9: Physical and chemical properties

Physical state	Liquid
Appearance	Pasty.
Colour	Various colours
Odour	slight
Odour threshold	Not determined
pH	≈ Not applicable
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Pasty; Not relevant
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	> 400 °C (DIN 51794)
Decomposition temperature	> 300 °C (Lit)
Viscosity, kinematic	No data available
Viscosity, dynamic	> 1000000 mPa·s (Brookfield)
Density	1.5 – 1.54 g/cm <sup>3</sup> 23°C, 1013hPa (ISO 1183-1 A)
Molecular mass	Not determined
Additional information	Explosion limits for released methanol: 5.5 - 44%(V)

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### SECTION 10: Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport
Chemical stability	Stable under normal conditions, Not established
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use, Not established
Conditions to avoid	None under recommended storage and handling conditions (see section 7), Direct sunlight, Extremely high or low temperatures
Incompatible materials	Reacts with: water, basic substances and acids . Reaction causes the formation of: methanol
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

CFS-S SIL / CP 601S	
LD50 oral rat	> 2000 mg/kg

diisobutoxy-bisethylacetoacetatitanate (83877-91-2)	
LD50 oral rat	> 5000 mg/kg bodyweight (Rat, Oral)

Skin corrosion or irritation	Not classified pH: ≈ Not applicable
Serious eye damage or eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (STOT) – single exposure	Not classified

diisobutoxy-bisethylacetoacetatitanate (83877-91-2)	
Specific target organ toxicity (STOT) – single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

Specific target organ toxicity (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. Ecotoxicity

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

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

diisobutoxy-bisethylacetoacetotitanate (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)

### 12.2. Persistence and degradability

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Persistence and degradability	Polymer component. biologically not degradable. Elimination by adsorption to activated sludge. The product of hydrolysis (methanol) is readily biodegradable.
diisobutoxy-bisethylacetoacetotitanate (83877-91-2)	
Persistence and degradability	Biodegradability: not applicable.

### 12.3. Bioaccumulative potential

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Bioaccumulative potential	Polymer component. No bioaccumulation expected.
diisobutoxy-bisethylacetoacetotitanate (83877-91-2)	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

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Mobility in soil	No additional information available
diisobutoxy-bisethylacetoacetotitanate (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

## SECTION 13: Disposal information

### 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: Transportation information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
<b>14.1. UN number or ID number</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
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>			
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. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health, and environmental regulations specific for the hazardous chemical in question

Regulation	Component/ Mixture
EHS Notification and Registration Scheme	
Environmental Quality (Chlorofluorocarbons Prohibition) Order 1993	Not applicable
Environmental Quality (Industrial Effluent) Regulations 2009	CFS-S SIL / CP 601S
Environmental Quality (Scheduled Wastes) Regulations 2007	CFS-S SIL / CP 601S
Control of Industrial Major Accident Hazards Regulations 1996	CFS-S SIL / CP 601S
Prohibition of Use of Substance Order 1999	CFS-S SIL / CP 601S
Use and Standards of Exposure of Chemical Hazardous to Health Regulations 2000	CFS-S SIL / CP 601S
Chemical Weapons Convention Act	CFS-S SIL / CP 601S
Corrosive and Explosive Substances and Offensive Weapons Act	CFS-S SIL / CP 601S
Dangerous Drugs Act	CFS-S SIL / CP 601S
Pesticides Act	CFS-S SIL / CP 601S
Petroleum (Safety Measures) Act	CFS-S SIL / CP 601S



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Poisons Act 1952		CFS-S SIL / CP 601S
Poisons (Psychotropic Substances) Regulations 1989		CFS-S SIL / CP 601S

### 15.2. International agreements

No additional information available

### SECTION 16: Other information

Version	7.3
Issue date	12/11/2024
Revision date	12/11/2024
Supersedes	15/11/2022

Indication of changes			
Section	Changed item	Change	Comments
			general update

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.