

#### Safety Data Sheet

According to SS 586 Part 3 (2022) Issue date: 13.02.2025

Revision date: 13.02.2025 Supersedes: 21.03.2024 Version: 3.0

#### **SECTION 1: Identification**

#### 1.1. Product identifier

Name CP 679A Plus
Product code BU Fire Protection

Chemical name

#### 1.2. Other means of identification

No additional information available

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

No additional information available

#### 1.4. Supplier's details

#### Supplier

Hilti Far East Private Ltd.

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#### Department issuing data specification sheet

Hilti AG

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product.compliance-fire.protection@hilti.com

#### 1.5. Emergency phone number

Emergency number

GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

#### **SECTION 2: Hazard identification**

#### 2.1. Classification of the substance or mixture

Not classified as hazardous according to GHS

#### 2.2. GHS label elements, including precautionary statements

No labelling applicable

#### 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	Concentration (%)	Formula	Product identifier
Titanium dioxide	2.5 – 10	О2Ті	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022- 006-00-2
Caramic acid, butyl-, 3-iodo-2propynyl ester	< 0.1	C8H12INO2	CAS-No.: 55406-53-6 EC-No.: 259-627-5 EC Index-No.: 616- 212-00-7
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one	< 0.1	C4H5NOS.C4H4CINOS	CAS-No.: 55965-84-9 EC Index-No.: 613- 167-00-5

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#### **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).

Inhalation Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

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

followed by warm water rinse. Wash skin with plenty of water.

Eye contact Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists. Rinse eyes with water as a precaution.

Ingestion Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center or a doctor if you feel unwell.

#### 4.2. Most important symptoms/effects, acute and delayed

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

Symptoms/effects after inhalation Although no appropriate human or animal health effects data are known to exist, this

material is expected to be an inhalation hazard.

Symptoms/effects after skin contact
Symptoms/effects after eye contact
Symptoms/effects after ingestion

May cause an allergic skin reaction.
None under normal conditions.

None under normal conditions.

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

#### **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

Fire hazard No fire hazard.

Explosion hazard No direct explosion hazard.

Hazardous decomposition products in case of fire Formation of toxic gases is possible during heating or in case of fire.

#### 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. Do not enter fire

area without proper protective equipment, including respiratory protection.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures Avoid contact with skin and eyes. Stop leak if safe to do so. Notify authorities if product

enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment Wear recommended personal protective equipment.

Emergency procedures Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection. For further information refer to section 8: "Exposure

controls/personal protection".

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Emergency procedures Ventilate area. Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 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 material for containment and cleaning up

For containment Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to

prevent migration and entry into sewers or streams. Stop leak without risks if possible.

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.

Other information Dispose of materials or solid residues at an authorized site.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling Ensure good ventilation of the work station. 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.

Handling temperature 5 – 30 °C

Hygiene measures 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

Technical measures Keep in a cool, well-ventilated place away from heat.

Storage conditions Keep only in the original container in a cool, well ventilated place away from : Keep

container closed when not in use.

Incompatible materials Sources of ignition. Direct sunlight.

Packaging materials Store always product in container of same material as original container.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters/Occupational exposure limits

No additional information available

#### 8.2. Appropriate engineering control measures

Appropriate engineering controls Ensure good ventilation of the work station.

#### 8.3. Personal protection - individual protection measures, such as personal protective equipment (PPE)

Hand protection Wear protective gloves.

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves,	Nitrile rubber (NBR), Butyl	6 (> 480 minutes)	>4		
Protective gloves,	rubber				
Reusable gloves					

Eye protection Chemical goggles or safety glasses. Safety glasses

Skin and body protection Protective clothing

Respiratory protection Avoid inhalation of vapour and spray mist. In case of inadequate ventilation wear respiratory

protection. (FFP2)

#### Personal protective equipment symbol(s)







Environmental exposure controls

Avoid release to the environment.

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#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Pasty.
Colour white

Odour slight,odourless
Odour threshold No data available

pH 7-7.8 pH solution concentration 10 %

Relative evaporation rate (butylacetate=1)

Evaporation rate

Mo data available

No data available

Melting point

Not applicable

Freezing point

No data available

No data available

No data available

No data available

Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Flammability Non flammable. Vapour pressure No data available Relative vapour density at 20°C No data available Relative density No data available 1.34 - 1.48 g/cm<sup>3</sup> Density No data available Solubility Partition coefficient n-octanol/water (Log Pow) No data available Partition coefficient n-octanol/water (Log Kow) No data available 25000 - 40000 mPa·s Viscosity, dynamic Explosive properties Product is not explosive.

Oxidising properties

Explosive limits

No data available

Particle size

No data available

Particle size distribution

Particle shape

No data available

Particle aspect ratio

No data available

Particle aspectific surface area

No data available

#### 9.2. Other information

VOC content < 1 %

#### **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.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 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.

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## **SECTION 11: Toxicological information**

11.1. Acute toxicity			
Acute toxicity (oral)	Not classified		
Acute toxicity (dermal)	Not classified		
Acute toxicity (inhalation)	Not classified		
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))		
LD50 oral	5000 mg/kg		
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))		
Mixture of 5-chloro-2-methylisothiazol-3	3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
LD50 oral rat	66 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Calculated by reference to active substance, Oral, 14 day(s))		
LD50 dermal rat	> 141 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))		
LC50 Inhalation - Rat	0.17 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Calculated by reference to active substance, Inhalation (dust), 14 day(s))		
Caramic acid, butyl-, 3-iodo-2propynyl	ester (55406-53-6)		
LD50 oral rat	1470 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimenta value, Oral, 14 day(s))		
LD50 dermal rabbit	> 2000 mg/kg bodyweight (EPA OPP 81-2, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))		
LC50 Inhalation - Rat	0.68 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value Inhalation (dust), 14 day(s))		
Skin corrosion/irritation	Not classified pH: 7 – 7.8		
Serious eye damage/irritation	Not classified		
Respiratory or skin sensitisation	Not classified		
Germ cell mutagenicity	Not classified		
Carcinogenicity	Not classified		
Reproductive toxicity	Not classified		
STOT-single exposure	Not classified		
STOT-repeated exposure	Not classified		
Caramic acid, butyl-, 3-iodo-2propynyl	ester (55406-53-6)		
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not classified		
CP 679A Plus			
Density	1.34 – 1.48 g/cm³		
Potential adverse human health effects and symptoms	Based on available data, the classification criteria are not met.		

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general

Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term

(acute)

Not classified

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Hazardous to the aquatic environment, long-term

(chronic)

Other information

Not classified

Avoid release to the environment.

Titanium dioxide (13463-67-7)		
LC50 - Fish [1]	> 1000 mg/l (Pisces, Fresh water)	
LC50 - Other aquatic organisms [1]	> 10000 mg/l	
EC50 - Crustacea [1]	> 1000 mg/l (Invertebrata, Fresh water)	
EC50 - Crustacea [2]	> 10000 mg/l	
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)	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-	one and 2-methylisothiazol-3(2H)-one (55965-84-9)	
LC50 - Fish [1]	0.19 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)	
EC50 - Crustacea [1]	0.007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)	
ErC50 algae	19.9 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)	
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)	
Caramic acid, butyl-, 3-iodo-2propynyl ester (	55406-53-6)	
LC50 - Fish [1]	67 μg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value, GLP)	
ErC50 algae	53 μg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Stati system, Fresh water, Experimental value, Nominal concentration)	
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.8 – 2.5 (log Koc, Calculated value)	

#### 12.2. Persistence and degradability

12121 Colorono and dogradamity			
CP 679A Plus			
Persistence and degradability	Not established.		
Titanium dioxide (13463-67-7)			
Not rapidly degradable			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD) Not applicable (inorganic)			
ThOD	Not applicable (inorganic)		

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Mixture of 5-chloro-2-methylisothiazol-3(2H)-	one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
Not rapidly degradable			
Persistence and degradability	Not readily biodegradable in water.		
Caramic acid, butyl-, 3-iodo-2propynyl ester (55406-53-6)			
Persistence and degradability	Not readily biodegradable in water.		
Chemical oxygen demand (COD)	1.15 g O <sub>2</sub> /g substance		
12.3. Bioaccumulative potential			
CP 679A Plus			
Bioaccumulative potential	Not established.		
Titanium dioxide (13463-67-7)			
Bioaccumulative potential	Not bioaccumulative.		
Mixture of 5-chloro-2-methylisothiazol-3(2H)-	one and 2-methylisothiazol-3(2H)-one (55965-84-9)		
BCF - Fish [1]	41 – 54 (OECD 305: Bioconcentration: Flow-Through Fish Test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)		
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)		
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).		
Caramic acid, butyl-, 3-iodo-2propynyl ester (55406-53-6)			
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.8 – 2.5 (log Koc, Calculated value)		
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).		
12.4. Mobility in soil			
CP 679A Plus			
Mobility in soil	No additional information available		
Titanium dioxide (13463-67-7)			
Surface tension	No data available in the literature		
Ecology - soil	Low potential for mobility in soil.		
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)			
Surface tension	No data available in the literature		
Partition coefficient n-octanol/water (Log Pow)	-0.32 – 0.7 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 20 °C)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.81 – 1 (log Koc, Calculated value)		
Ecology - soil	Highly mobile in soil.		
Caramic acid, butyl-, 3-iodo-2propynyl ester (	(55406-53-6)		
Surface tension	69.1 mN/m (158 mg/l, EU Method A.5: Surface tension)		
Partition coefficient n-octanol/water (Log Pow)	2.8 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)		

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Caramic acid, butyl-, 3-iodo-2propynyl ester (55406-53-6)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.8 – 2.5 (log Koc, Calculated value)	
Ecology - soil	Low potential for adsorption in soil.	

12.5. Other adverse effects

Ozone Not classified

Other adverse effects

No additional information available

#### **SECTION 13: Disposal considerations**

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

Sewage disposal recommendations Disposal must be done according to official regulations.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Disposal must be

done according to official regulations.

Additional information Do not re-use empty containers.

### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID /

Not applicable	Not applicable	Not applicable		
Not applicable	Not applicable	Not applicable		
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable		
Not applicable	Not applicable	Not applicable		
Not applicable	Not applicable	Not applicable		
	Not applicable  Not applicable	Not applicable  Not applicable  Not applicable		

#### 14.6. Special precautions for user

### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Rail transport

Not applicable

#### 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

Regulation		Component / Mixture
Arms and Explosives Act	Not applicable	
Chemical Weapons Prohibition Act		
Environmental Protection and Management (Air Impurities) Regulations		
Environmental Protection and Management Act (Hazardous Substances)		
Environmental Public Health (Quality of Piped Drinking Water) Regulations		
Fire Safety Act/Fire Safety (Petroleum and Flammable Materials) Regulations		
Maritime and Port Authority of Singapore (Dangerous, Petroleum and Explosives) Regulations		
Misuse of Drugs Act		
Poisons Act	Poisons List	CP 679A Plus
Poisons Rules	First Schedule	CP 679A Plus
Hazardous waste (Control of export, import and transit) Act	Not applicable	
Strategic goods (Control) Act		

#### 15.2. International regulations

No additional information available

#### 15.3 Chemical inventory status

No additional information available

#### **SECTION 16: Other information**

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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.

Abbreviations and acronyms

ADN - European Agreement concerning the International Carriage of Dangerous Goods by

Inland Waterways

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE - Acute Toxicity Estimate

BCF - Bioconcentration factor

BLV - Biological limit value

BOD - Biochemical oxygen demand (BOD)

COD - Chemical oxygen demand (COD)

DMEL - Derived Minimal Effect level

DNEL - Derived-No Effect Level

EC-No. - European Community number

EC50 - Median effective concentration

EN - European Standard

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IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

LD50 - Median lethal dose

LOAEL - Lowest Observed Adverse Effect Level

NOAEC - No-Observed Adverse Effect Concentration

NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration

OECD - Organisation for Economic Co-operation and Development

OEL - Occupational Exposure Limit

PBT - Persistent Bioaccumulative Toxic

PNEC - Predicted No-Effect Concentration

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

SDS - Safety Data Sheet

STP - Sewage treatment plant

ThOD - Theoretical oxygen demand (ThOD)

TLM - Median Tolerance Limit

VOC - Volatile Organic Compounds

CAS-No. - Chemical Abstract Service number

N.O.S. - Not Otherwise Specified

vPvB - Very Persistent and Very Bioaccumulative

ED - Endocrine disrupting properties

None.

#### Other information

Indication of changes			
Section	Changed item	Change	Comments
	Regulations Singapore	Modified	

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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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