CP 679A Plus

Safety Data Sheet

According to ICOP 2014
Issue date: 21/03/2024 Revision date: 21/3/2024 Supersedes: 01/03/2023 Version: 2.0

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

1.1. Product identifier

Name CP 679A Plus
Chemical name

1.2. Other means of identification

Product code BU Fire Protection

1.3. Recommended use of the chemical and restrictions on use

No additional information available

1.4. Supplier details

Supplier
Hilti (Malaysia) Sdn. Bhd.
F-5-A, Sime Darby Brunsfield 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

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)
Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

2.2. Label elements

Labelling according to Industry Code of Practice on chemicals classification and hazard communication (2019)
Signal word (GHS MY) -
Hazard statements (GHS MY) H412 - Harmful to aquatic life with long lasting effects
Precautionary statements (GHS MY) P273 - Avoid release to the environment.

2.3. Other hazards that do not result in classification

No additional information available

SECTION 3: Composition and information of the ingredients of the hazardous chemical

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Titanium dioxide	CAS-No.: 13463-67-7	2.5 – 10
Caramic acid, butyl-, 3-iodo-2propynyl ester	CAS-No.: 55406-53-6	< 0.1
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one	CAS-No.: 55965-84-9	< 0.1

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: 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.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. 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.

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

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

No additional information available

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. Physicochemical hazards arising from the chemical

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 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: 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

General measures: Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: 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	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	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.

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 materials	Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters

Titanium dioxide (13463-67-7)	
Malaysia - Occupational Exposure Limits	
Local name	Titanium dioksida # Titanium dioxide
PEL (OEL TWA) [1]	10 mg/m³
MEL (mg/m³)	30 mg/m³

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

Appropriate engineering controls	Ensure good ventilation of the work station.

8.3. Individual protection measures, such as PPE

Hand protection:					
Wear protective gloves.					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Disposable gloves, Protective gloves, Reusable gloves	Nitrile rubber (NBR), Butyl rubber	6 (> 480 minutes)	>4		

Eye protection:
Chemical goggles or 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):

SECTION 9: 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 %
Melting point	No data available
Freezing point	No data available
Boiling point	≈ 100 °C
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	Non flammable.
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	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	25000 – 40000 mPa·s
Explosive properties	Product is not explosive.
Density	1.34 – 1.48 g/cm³
Oxidising properties	Not applicable.
VOC content	< 1 %

SECTION 10: Stability and reactivity

Reactivity	No data available
Chemical stability	Stable under normal conditions
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use
Conditions to avoid	None under recommended storage and handling conditions (see section 7)
Incompatible materials	Strong acids,Strong bases
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced

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

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(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	300 – 500 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	0.67 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))

Skin corrosion or irritation	Not classified pH: 7 – 7.8
Serious eye damage or eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	Not classified
Specific target organ toxicity (STOT) – single exposure	Not classified
Specific target organ toxicity (STOT) – repeated exposure	Not classified

Caramic acid, butyl-, 3-iodo-2propynyl ester (55406-53-6)	
Specific target organ toxicity (STOT) – repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard	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. Ecotoxicity

Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Harmful to aquatic life with long lasting effects.
Other information	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]	0.2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Flow-through system, Experimental value)
LC50 - Fish [2]	85 mg/l (EPA OPP 72-1, 96 h, Oncorhynchus mykiss, Flow-through system, Salt water, Experimental value, Reaction product)
EC50 - Crustacea [1]	0.16 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Flow-through system, Experimental value)
EC50 - Crustacea [2]	60 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Reaction product)
ErC50 algae	> 41.3 mg/l (EPA OTS 797.1050, 96 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, Reaction product)
BCF - Fish [1]	3.3 – 4.5 (Cyprinus carpio, Literature study)
Partition coefficient n-octanol/water (Log Pow)	2.81 (Literature, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.1 (log Koc, Experimental value)

12.2. Persistence and degradability

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)

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	Readily biodegradable in the soil. Readily biodegradable in water.
Chemical oxygen demand (COD)	1.15 g O_2/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)	
BCF - Fish [1]	3.3 – 4.5 (Cyprinus carpio, Literature study)
Partition coefficient n-octanol/water (Log Pow)	2.81 (Literature, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.1 (log Koc, Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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)

Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	
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)	2.81 (Literature, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.1 (log Koc, Experimental 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 information

13.1. Disposal methods

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

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transportation 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 name			
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			
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

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 hazardous chemical in question

Regulation		Component/ Mixture
EHS Notification and Registration Scheme		
Environmental Quality (Chlorofluorocarbons Prohibition) Order 1993	Not applicable	CP 679A Plus
Environmental Quality (Industrial Effflluent) Regulations 2009		CP 679A Plus
Environmental Quality (Scheduled Wastes) Regulations 2007		CP 679A Plus
Control of Industrial Major Accident Hazards Regulations 1996		CP 679A Plus
Prohibition of Use of Substance Order 1999		CP 679A Plus
Use and Standards of Exposure of Chemical Hazardous to Health Regulations 2000		CP 679A Plus
Chemical Weapons Convention Act		CP 679A Plus
Corrosive and Explosive Substances and Offensive Weapons Act		CP 679A Plus
Dangerous Drugs Act		CP 679A Plus
Pesticides Act		CP 679A Plus
Petroleum (Safety Measures) Act		CP 679A Plus
Poisons Act 1952		CP 679A Plus
Poisons (Psychotropic Substances) Regulations 1989		CP 679A Plus

15.2. International agreements

No additional information available

SECTION 16: Other information

Version	2.0
Issue date	21/3/2024
Revision date	21/03/2024
Supersedes	01/03/2023
Other information	None.

Full text of H-statements	
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.