

CP 679A Plus

According to Taiwan Ministry of Labour Lao-zhi Shou-tzu No. 10702052242, "Regulations for the Labeling and Hazard Communication of Hazardous Chemicals"

Issue date: 2024/03/21 Revision date: 2024/03/21 Supersedes: 2023/03/01 Version: 2.0

1. Identification of the chemical and of the business entity

Chemical name	CP 679A Plus
Product code	BU Fire Protection
Other Names	-
Recommended use	-
Restrictions on use	-
Names, addresses, and phone numbers of manufacturer, importer or supplier	Supplier 喜利得股份有限公司 220 台湾 台北 - 臺灣 新北市板橋區新站路16號24樓 T +886 2 6630 0345; 0800 221 036 Toll Free - F +886 2 2950 6132 twcs@hilti.com Department issuing data specification sheet Hilti AG 9494 Liechtenstein Schaan Feldkircherstraße 100 T +423 234 2111 product.compliance-fire.protection@hilti.com
Emergency number	GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

2. Hazard(s) identification

GHS classification (Taiwan)

Environmental hazards	Hazardous to the aquatic environment - Acute Hazard, Category 3 Hazardous to the aquatic environment - Chronic Hazard, Category 3
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Label content

Hazard pictograms (GHS TW)	-
Signal word (GHS TW)	-
Hazard statements (GHS TW)	(H412) Harmful to aquatic life with long lasting effects
Precautionary statements	-
Prevention precautionary statements	(P273) Avoid release to the environment.
Response Precautionary Statements	-
Storage precautionary statements	-
Disposal precautionary statements	-
Other hazards which do not result in classification	-

3. Composition/information on ingredients

Substance:

Not applicable

Mixture:

Chemical properties Refer to Section 9

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Name	CAS-No.	Concentration
Titanium dioxide	13463-67-7	2.5 - 10
Caramic acid, butyl-, 3-iodo-2propynyl ester (丁胺甲酸 3-碘-2-丙炔酯)	55406-53-6	< 0.1
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (5-氯-2-甲基異噻唑啉-3(2H)-酮、2-甲基異噻唑啉-3(2H)-酮的混合物)	55965-84-9	< 0.1

4. First-aid measures

First aid measures for different exposure routes

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

Most Important Symptoms/Effects

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.

Protection for the first aid staff

Personal Protection in First Aid and Measures	-
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Notes to physician

No additional information available

5. Firefighting measures

Extinguishing media

Suitable extinguishing media	Foam Dry powder Carbon dioxide Water spray Sand
Unsuitable extinguishing media	Do not use a heavy water stream

Specific hazards arising from firefighting measures

Fire hazard	-
Explosion hazard	No direct explosion hazard
General measures	Avoid contact with skin and eyes
Reactivity in case of fire	-
Hazardous decomposition products in case of fire	Formation of toxic gases is possible during heating or in case of fire.

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Specific firefighting methods

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
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Special protective equipment and precautions for fire-fighters

Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection
Personal protection (Emergency response)	-

6. Accidental release measures

Personal precautions

General measures	Avoid contact with skin and eyes
For non-emergency personnel	
Emergency procedures	Evacuate unnecessary personnel
For emergency responders	
Protective equipment	Equip cleanup crew with proper protection
Emergency procedures	Ventilate area

Environmental precautions

Environmental precautions	Avoid release to the environment Prevent entry to sewers and public waters Notify authorities if liquid enters sewers or public waters
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Methods and material for containment and cleaning up

For containment	-
Methods for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible Collect spillage.

7. Handling and storage

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
Hygiene measures	Do not eat, drink or smoke when using this product.
Handling temperature	5 - 30 ° C

Storage

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

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8. Exposure controls/personal protection

Appropriate engineering controls

Ensure good ventilation of the work station

Control parameters

Titanium dioxide (13463-67-7)

Taiwan - Occupational Exposure Limits

Local name	二氧化鈦 # Titanium dioxide
OEL TWA	10 mg/m ³
Regulatory reference	勞工作業場所容許暴露標準 (2018.03.14 修正) # Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace (2018.03.14 Modified)

Additional information

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

Personal protective equipment

General:

Personal protective equipment:

Avoid all unnecessary exposure. Gloves.

Respiratory protection:

Respiratory protection

Avoid inhalation of vapour and spray mist. In case of inadequate ventilation wear respiratory protection. (FFP2)

Hand protection:

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:

Eye protection

Chemical goggles or safety glasses

Skin and body protection:

Skin and body protection

Protective clothing

Personal protective equipment symbol(s):



Hygiene measures:

Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Appearance	Pasty
Physical state	Liquid
Colour	white
Odour	slight, odourless
Odour threshold [ppm]	No data available
pH	7 - 7.8
pH solution concentration	10 %

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Evaporation rate	No data available
VOC content	< 1 %
Melting point	No data available
Boiling point	≈ 100 ° C
Flash point	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20° C	No data available
Density	1.34 - 1.48 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Viscosity, dynamic	25000 - 40000 mPa • s
Explosive limits (vol %)	No data available
Explosive properties	Product is not explosive
Oxidising properties	Not applicable

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

11. Toxicological information

Routes of exposure

No additional information available

Symptoms

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

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))

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Titanium dioxide (13463-67-7)	
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/irritation

Skin corrosion/irritation Not classified
pH: 7 - 7.8

Serious eye damage/irritation

Serious eye damage/irritation Not classified

Respiratory or skin sensitisation

Respiratory or skin sensitisation Not classified

Chronic toxicity or long-term toxicity

Germ cell mutagenicity

Germ cell mutagenicity Not classified

Carcinogenicity

Carcinogenicity Not classified

Reproductive toxicity

Reproductive toxicity Not classified

STOT-single exposure

STOT-single exposure Not classified

STOT-repeated exposure

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.
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Aspiration hazard

Aspiration hazard Not classified

Viscosity, kinematic No data available

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12. Ecological information

Ecotoxicity

Hazardous to the aquatic environment, short-term (acute)

Hazardous to the aquatic environment, short-term (acute) Harmful to aquatic life.

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
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)
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)

Hazardous to the aquatic environment, long-term (chronic)

Hazardous to the aquatic environment, long-term (chronic) Harmful to aquatic life with long lasting effects.

Additional ecotoxicological information

No additional information available

Persistence and degradability

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Persistence and degradability	Not established
Titanium dioxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

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Titanium dioxide (13463-67-7)	
Mixture of 5-chloro-2-methylisothiazol-3(2H)-one and 2-methylisothiazol-3(2H)-one (55965-84-9)	
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

Bioaccumulative potential

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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)

Mobility in soil

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)

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Titanium dioxide (13463-67-7)	
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.

Other adverse effects

Ozone	Not classified
Other information	Avoid release to the environment.

13. Disposal considerations

Waste treatment methods	-
Ecology - waste materials	Avoid release to the environment.
Sewage disposal recommendations	-
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations

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 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

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14.7. Maritime transport in bulk according to IMO instruments

Not applicable

15. Regulatory information

Applicable regulations

1. Occupational Safety and Health Act
2. Methods and Facilities Standards for the Storage, Clearance and Disposal of Industrial Waste
3. Traffic Safety Rule

16. Other information

Literature references

1. 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

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

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.