

## Safety Data Sheet

according to the United Nations GHS (Rev. 4, 2011)

Issue date: 01/10/2021 Revision date: 01/10/2021 Supersedes: 07/10/2019

Version: 6.0

## **SECTION 1: Identification**

### 1.1. GHS Product identifier

Product form Mixture
Trade name CP 678
UN-No. (ADR) 3077

Product code BU Fire Protection



#### 1.2. Other means of identification

No additional information available

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

Use of the substance/mixture Firestop coating

### 1.4. Supplier's details

Supplier Department issuing data specification sheet

Hilti India Private Limited Hilti AG

F-90/4, Okhla Industrial Area Phase 1 Feldkircherstraße 100
110 020 New Delhi - India 9494 Schaan - Liechtenstein

T +9111 4270 1111 - F +91 405 23318 T +423 234 2111

### 1.5. Emergency phone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+9111 4064 6500 +9111 4270 1122

## **SECTION 2: Hazard identification**

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

#### Classification according to the United Nations GHS

Carcinogenicity, Category 2 H351 Calculation method Reproductive toxicity, Category 2 H361 Calculation method Hazardous to the aquatic environment — Chronic H410 Calculation method

Hazard, Category 1

Full text of H-statements: see section 16

Adverse physicochemical, human health and

environmental effects

Suspected of causing cancer, Harmful to aquatic life with long lasting effects.

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### GHS Label elements, including precautionary statements

#### Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)





Signal word (GHS UN)

Hazardous ingredients

Hazard statements (GHS UN)

Warning Tris[2-chloro-1-(chloromethyl)ethyl] phosphate; melamine

GHS09

H351 - Suspected of causing cancer

H361 - Suspected of damaging fertility or the unborn child H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS UN)

P201 - Obtain special instructions before use. P273 - Avoid release to the environment.

P280 - Wear eye protection, protective clothing, protective gloves.

P302+P352 - IF ON SKIN: Wash with plenty of water/....

P308+P313 - IF exposed or concerned: Get medical advice, medical attention.

#### 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   | Product identifier   | %       | Classification according to the United Nations GHS  |
|--|----------------------|---------|---|
| melamine                                       | (CAS-No.) 108-78-1   | 10 – 15 | Acute toxicity (oral), Category 5,<br>H303<br>Carcinogenicity, Category 2, H351<br>Reproductive toxicity, Category 2,<br>H361<br>Hazardous to the aquatic<br>environment - Acute Hazard Not<br>classified   |
| Tris[2-chloro-1-(chloromethyl)ethyl] phosphate | (CAS-No.) 13674-87-8 | 1 – 5   | Flammable liquids Not classified Acute toxicity (dermal) Not classified Acute toxicity (inhalation:dust,mist) Not classified Carcinogenicity, Category 2, H351 Hazardous to the aquatic environment — Acute Hazard, Category 2, H401 Hazardous to the aquatic environment — Chronic Hazard, Category 1, H410 (M=10) |

Full text of H-statements: see section 16

## **SECTION 4: First-aid measures**

## **Description of necessary first-aid measures**

First-aid measures general IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing. Get medical

advice/attention if you feel unwell.

First-aid measures after skin contact Wash skin with plenty of water. First-aid measures after eye contact Rinse eyes with water as a precaution.

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First-aid measures after ingestion

Get medical advice/attention if you feel unwell. Call a poison center or a doctor if you feel

unwell.

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

No additional information available

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

Treat symptomatically.

## **SECTION 5: Fire-fighting measures**

### 5.1. Suitable extinguishing media

Suitable extinguishing media Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire

Carbon dioxide. Carbon monoxide.

### 5.3. Special protective actions for fire-fighters

Protection during firefighting

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

### 6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection"."

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up

Mechanically recover the product. Notify authorities if product enters sewers or public

waters.

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

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

### 7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Obtain special instructions before use. Do not

handle until all safety precautions have been read and understood. Wear personal

protective equipment.

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

Storage conditions Store in a dry place. Store locked up. Store in a well-ventilated place. Keep cool.

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

### 8.1. Control parameters

No additional information available

### 8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

Environmental exposure controls Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection Protective gloves

| Туре              | Material             | Permeation       | Thickness (mm) | Penetration | Standard   |
|-------------------|----------------------|------------------|----------------|-------------|------------|
| Disposable gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) |                |             | EN ISO 374 |

Eye protection

| Туре           | Field of application | Characteristics | Standard       |
|----------------|----------------------|-----------------|----------------|
| Safety glasses | Droplet              |                 | EN 166, EN 170 |

Skin and body protection Wear suitable protective clothing

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. During spraying wear

suitable respiratory equipment

| Device | Filter type | Condition | Standard |
|--------|-------------|-----------|----------|
|        |             |           |          |

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 Solid
Appearance Pasty

Molecular mass Not determined

Colour white.
Odour mild.

Odour threshold Not available
Melting point Not applicable
Freezing point Not available
Boiling point 100 °C

Flammability (solid, gas)

Not applicable
Explosive limits

Not applicable
Lower explosive limit (LEL)

Not applicable

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Upper explosive limit (UEL) Not applicable Flash point Not applicable Auto-ignition temperature Not applicable Decomposition temperature Not available рΗ Not available Not available pH solution Viscosity, kinematic (calculated value) (40 °C) 46153.846 mm<sup>2</sup>/s Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure 23 hPa Vapour pressure at 50 °C Not available Density 1.3 g/cm<sup>3</sup> Not available Relative density Relative vapour density at 20 °C Not applicable Solubility Miscible with water. Viscosity, dynamic 60000 mPa·s

Explosive properties Product is not explosive

Particle size Not available
Particle size distribution Not available
Particle shape Not available
Particle aspect ratio Not available
Particle specific surface area Not available

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

No additional information available

## **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

No additional information available

### 10.6. 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

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Acute toxicity (inhalation)

Not classified

| Tris[2-chloro-1-(chloromethyl)ethyl] p | shosnhata (13671-87-8)   |
|--|--|
| LD50 oral rat                          | > 2000 mg/kg (Rat, Oral)   |
| LD50 dermal rat                        | > 2000 mg/kg (Rat, Dermal)   |
| LD50 dermal rabbit                     | > 23700 mg/kg (Rabbit, Dermal)   |
| LC50 Inhalation - Rat                  | > 5.22 mg/l (4 h, Rat, Inhalation)   |
| melamine (108-78-1)                    |  |
| LD50 oral rat                          | 3161 – 3828 mg/kg bodyweight (Rat, Male / female, Experimental value, Oral, 14 day(s))                               |
| LD50 dermal rabbit                     | > 1000 mg/kg (Rabbit, Experimental value, Dermal)  |
| LC50 Inhalation - Rat                  | > 5.19 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol)) |
| Skin corrosion/irritation              | Not classified   |
| Serious eye damage/irritation          | Not classified   |
| Respiratory or skin sensitisation      | Not classified   |
| Germ cell mutagenicity                 | Not classified   |
| Carcinogenicity                        | Suspected of causing cancer.   |
| Reproductive toxicity                  | Suspected of damaging fertility or the unborn child.   |
| STOT-single exposure                   | Not classified   |
| STOT-repeated exposure                 | Not classified   |
| Aspiration hazard                      | Not classified   |
| CP 678                                 |  |
| Viscosity, kinematic                   | 46153.846 mm <sup>2</sup> /s   |

## **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general

Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-

term (acute)

Not classified

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

Very toxic to aquatic life with long lasting effects.

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

Calculation method

| Tris[2-chloro-1-(chloromethyl)ethyl | phosphate (13674-87-8)  |
|-------------------------------------|---|
| LC50 - Fish [1]                     | 1.1 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static           |
|                                     | system, Fresh water, Experimental value, Nominal concentration)                                 |
| EC50 - Crustacea [1]                | 3.8 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Flow-           |
|                                     | through system, Fresh water, Experimental value, GLP)   |
| ErC50 algae                         | 4.5 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static |
|                                     | system, Fresh water, Experimental value, GLP)   |
| melamine (108-78-1)                 |   |
| LC50 - Fish [1]                     | > 3000 mg/l (96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental           |
|                                     | value, Nominal concentration)   |
| EC50 - Crustacea [1]                | 200 mg/l (EPA OPP 72-2, 48 h, Daphnia magna, Static system, Fresh water, Experimental           |
|                                     | value, Locomotor effect)  |
| EC50 96h - Algae [1]                | 325 mg/l (Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value,      |
|                                     | Nominal concentration)  |

## 12.2. Persistence and degradability

| CP 678                        |                                     |
|-------------------------------|-------------------------------------|
| Persistence and degradability | No additional information available |
|                               |                                     |
|                               |                                     |

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| Tris[2-chloro-1-(chloromethyl)ethyl] phosphate (13674-87-8)        |                                     |  |  |  |
|--|-------------------------------------|--|--|--|
| Persistence and degradability  Not readily biodegradable in water. |                                     |  |  |  |
|  |                                     |  |  |  |
| melamine (108-78-1)  |                                     |  |  |  |
| Persistence and degradability                                      | Not readily biodegradable in water. |  |  |  |
|  |                                     |  |  |  |
| ThOD   | 3.04 g O <sub>2</sub> /g substance  |  |  |  |

## 12.3. Bioaccumulative potential

| CP 678   |  |  |  |
|--|--|--|--|
| Bioaccumulative potential                        | No additional information available  |  |  |
| ·  |  |  |  |
|  |  |  |  |
| Tris[2-chloro-1-(chloromethyl)ethyl] phosphate ( | 13674-87-8)  |  |  |
| BCF - Fish [1]                                   | 0.3 – 3.3 (6 week(s), Cyprinus carpio, Literature study)   |  |  |
|  |  |  |  |
| BCF - Fish [2]                                   | 50 – 89 (720 h, Oryzias latipes, Static system, Literature study)  |  |  |
| Dortition coefficient a extend (water (Lea Vew)  | 2 CO /Funarimental value FILMathad A 9: Partition Coefficient 20 °C)                                     |  |  |
| Partition coefficient n-octanol/water (Log Kow)  | 3.69 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)                                   |  |  |
| Bioaccumulative potential                        | Low potential for bioaccumulation (BCF < 500).   |  |  |
| melamine (108-78-1)                              |  |  |  |
| BCF - Fish [1]                                   | 0.05 – 0.11 (72 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)                  |  |  |
|  |  |  |  |
| Partition coefficient n-octanol/water (Log Kow)  | -1.22 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method. 22 °C) |  |  |
| Bioaccumulative potential                        | Low potential for bioaccumulation (BCF < 500).   |  |  |

## 12.4. Mobility in soil

| CP 678  |  |  |  |
|---|--|--|--|
| Mobility in soil                                  | No additional information available  |  |  |
|   |  |  |  |
| Tris[2-chloro-1-(chloromethyl)ethyl] phosphate (1 | (3674-87-8)  |  |  |
| Partition coefficient n-octanol/water (Log Koc)   | 3.25 (log Koc, OECD 106: Adsorption/Desorption Using a Batch Equilibrium Method, |  |  |
|   | Experimental value, GLP)   |  |  |
| Ecology - soil                                    | Low potential for mobility in soil.  |  |  |
| melamine (108-78-1)                               |  |  |  |
| Partition coefficient n-octanol/water (Log Koc)   | 1.51 (log Koc, SRC PCKOCWIN v2.0, QSAR)  |  |  |
| Ecology - soil                                    | Highly mobile in soil.   |  |  |

### 12.5. Other adverse effects

Ozone Not classified

Other adverse effects No additional information available

## **SECTION 13: Disposal considerations**

#### 13.1. Disposal methods

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

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID /

| ADR                          | IMDG    | IATA    | RID     |
|------------------------------|---------|---------|---------|
| 14.1. UN number or ID number |         |         |         |
| UN 3077                      | UN 3077 | UN 3077 | UN 3077 |

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| ADR                                    | IMDG                             | IATA                              | RID                              |  |
|--|----------------------------------|-----------------------------------|----------------------------------|--|
| ASI                                    |                                  | MIA                               | Mis                              |  |
| 14.2. UN proper shipping nan           | ne                               |                                   |                                  |  |
| ENVIRONMENTALLY                        | ENVIRONMENTALLY                  | Environmentally hazardous         | ENVIRONMENTALLY                  |  |
| HAZARDOUS SUBSTANCE,                   | HAZARDOUS SUBSTANCE,             | substance, solid, n.o.s. (tris[2- | HAZARDOUS SUBSTANCE,             |  |
| SOLID, N.O.S. (tris[2-chloro-1-        | SOLID, N.O.S. (tris[2-chloro-1-  | chloro-1-(chloromethyl)ethyl]     | SOLID, N.O.S. (tris[2-chloro-1-  |  |
| (chloromethyl)ethyl] phosphate)        | (chloromethyl)ethyl] phosphate)  | phosphate)                        | (chloromethyl)ethyl] phosphate)  |  |
| Transport document description         |                                  | ,                                 |                                  |  |
| UN 3077 ENVIRONMENTALLY                | UN 3077 ENVIRONMENTALLY          | UN 3077 Environmentally           | UN 3077 ENVIRONMENTALLY          |  |
| HAZARDOUS SUBSTANCE,                   | HAZARDOUS SUBSTANCE,             | hazardous substance, solid,       | HAZARDOUS SUBSTANCE,             |  |
| SOLID, N.O.S. (tris[2-chloro-1-        | SOLID, N.O.S. (tris[2-chloro-1-  | n.o.s. (tris[2-chloro-1-          | SOLID, N.O.S. (tris[2-chloro-1-  |  |
| (chloromethyl)ethyl] phosphate),       | (chloromethyl)ethyl] phosphate), | (chloromethyl)ethyl] phosphate),  | (chloromethyl)ethyl] phosphate), |  |
| 9, III, (-)                            | 9, III, MARINE POLLUTANT         | 9, III                            | 9, III                           |  |
| 14.3. Transport hazard class(          | 14.3. Transport hazard class(es) |                                   |                                  |  |
| 9                                      | 9                                | 9                                 | 9                                |  |
|  |                                  |                                   |                                  |  |
| 14.4. Packing group                    |                                  |                                   |                                  |  |
| III                                    | III                              | III                               | III                              |  |
| 14.5. Environmental hazards            |                                  |                                   |                                  |  |
| Dangerous for the environment:         | Dangerous for the environment:   | Dangerous for the environment:    | Dangerous for the environment:   |  |
| Yes                                    | Yes                              | Yes                               | Yes                              |  |
|  | Marine pollutant: Yes            |                                   |                                  |  |
| No supplementary information available |                                  |                                   |                                  |  |

## 14.6. Special precautions for user

## **Overland transport**

Classification code (ADR) M7

Special provisions (ADR) 274, 335, 375, 601

Limited quantities (ADR)

Packing instructions (ADR) P002, IBC08, LP02, R001

Mixed packing provisions (ADR) MP10 Transport category (ADR) 3

Orange plates

90 3077

Tunnel restriction code (ADR)

## Transport by sea

Special provisions (IMDG) 274, 335, 966, 967, 969

Limited quantities (IMDG) 5 kg Packing instructions (IMDG) LP02, P002

EmS-No. (Fire) F-A S-F EmS-No. (Spillage) Stowage category (IMDG) SW23 Stowage and handling (IMDG)

## Air transport

PCA packing instructions (IATA) 956 400kg PCA max net quantity (IATA)

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CAO packing instructions (IATA) 956

Special provisions (IATA) A97, A158, A179, A197, A215

Rail transport

Special provisions (RID) 274, 335, 375, 601

Limited quantities (RID) 5kg

Packing instructions (RID) P002, IBC08, LP02, R001

### 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

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 01/10/2021

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 01/10/2021

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 07/10/2019

| Section | Changed item                           | Change   | Comments |
|---------|--|----------|----------|
| 1.1     | Name                                   | Modified |          |
| 3       | Composition/information on ingredients | Modified |          |

| Full text of H-statements: |  |  |
|----------------------------|--|--|
| H303                       | May be harmful if swallowed                          |  |
| H351                       | Suspected of causing cancer                          |  |
| H361                       | Suspected of damaging fertility or the unborn child  |  |
| H401                       | Toxic to aquatic life                                |  |
| H410                       | Very toxic to aquatic life with long lasting effects |  |

### SDS\_UN\_Hilti

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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