

## SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

### Cadmium chloride dihydrate

Creation date	20th September 2019	Version	3.0
Revision date	17th October 2024		

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**  
 Cadmium chloride dihydrate  
 Substance / mixture substance  
 Chemical name cadmium chloride  
 CAS number 10108-64-2  
 Index number 048-008-00-3  
 EC (EINECS) number 233-296-7  
 Other substance name  
 Cadmium chloride dihydrate
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Substance's intended use**  
 Chemical production, analytical chemistry, laboratory synthesis, industrial applications.  
**Substance uses advised against**  
 The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**  
**Supplier**  
 Name or trade name Ing. Petr Švec - PENTA s.r.o.  
 Address Radiová 1122/1, Praha 10, 102 00  
 Czech Republic  
 Identification number (CRN) 02096013  
 VAT Reg No CZ02096013  
 Phone +420 226 060 681  
 E-mail info@pentachemicals.eu  
 Web address www.pentachemicals.eu
- Competent person responsible for the safety data sheet**  
 Name Ing. Petr Švec - PENTA s.r.o.  
 E-mail info@pentachemicals.eu
- 1.4. Emergency telephone number**  
 European emergency number: 112 112

#### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**  
**Classification of the substance in accordance with Regulation (EC) No 1272/2008**  
 The substance is classified as dangerous.

Acute Tox. 3, H301  
 Acute Tox. 2, H330  
 Muta. 1B, H340  
 Carc. 1B, H350  
 Repr. 1B, H360FD  
 STOT RE 1, H372  
 Aquatic Acute 1, H400  
 Aquatic Chronic 1, H410

**Most serious adverse effects on human health and the environment**

Toxic if swallowed. Fatal if inhaled. May cause genetic defects. May cause cancer. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

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#### 2.2. Label elements

##### Hazard pictogram



##### Signal word

Danger

##### Dangerous substance

cadmium chloride

(Index: 048-008-00-3; CAS: 10108-64-2)

##### Hazard statements

H301	Toxic if swallowed.
H330	Fatal if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

##### Precautionary statements

P201	Obtain special instructions before use.
P260	Do not breathe dust/mist.
P273	Avoid release to the environment.
P284	Wear respiratory protection.
P310	Immediately call a doctor.

##### Supplemental information

Restricted to professional users.

#### 2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Dust may form explosive mixture with air.

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#### SECTION 3: Composition/information on ingredients

##### 3.1. Substances

###### Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 048-008-00-3 CAS: 10108-64-2 EC: 233-296-7	<b>substance main component</b> cadmium chloride	>96	Acute Tox. 3, H301 Acute Tox. 2, H330 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360FD STOT RE 1 (**), H372 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Specific concentration limit: STOT RE 1, H372: C ≥ 7 % STOT RE 2, H373: 0.1 % ≤ C < 7 % Carc. 1B, H350: C ≥ 0.01 %	1, 2

###### Notes

\*\* another exposure route cannot be ruled out

1 Substance of very high concern - SVHC.

2 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

###### If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

###### If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers.

###### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

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**If swallowed**

INDUCE VOMITING! Vomiting should be induced in the person only if conscious, within 1 hour from ingestion. If in doubt whether vomiting should be induced, contact the Toxicological Information Centre and give information about the substances or composition of the product as provided on the original packaging or in the safety data sheet of the product. FOLLOWING INGESTION OF TOXIC OR HIGHLY TOXIC SUBSTANCES, GIVE 10-20 CRUSHED TABLETS OF ACTIVATED CARBON, MIXED IN WATER, WITHIN NO LATER THAN 5 MINUTES - irrespective of whether vomiting could be induced. Call medical rescue service.

**4.2. Most important symptoms and effects, both acute and delayed**

**If inhaled**

Cough, headache.

**If on skin**

Not expected.

**If in eyes**

Not expected.

**If swallowed**

Irritation, nausea.

**4.3. Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment.

### SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable extinguishing media**

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

**Unsuitable extinguishing media**

Water - full jet.

**5.2. Special hazards arising from the substance or mixture**

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

**5.3. Advice for firefighters**

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### SECTION 6: Accidental release measures

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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

**6.2. Environmental precautions**

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

**6.3. Methods and material for containment and cleaning up**

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

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#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Do not inhale dust. Prevent contact with skin and eyes. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

##### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Store locked up. Keep container tightly closed.

##### 7.3. Specific end use(s)

not available

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

##### 8.1. Control parameters

none

##### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

##### Eye/face protection

It is not needed.

##### Skin protection

Hand protection: Protective gloves resistant to the product (nitrile rubber). Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

##### Respiratory protection

Use insulating breathing apparatus when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. In case of inadequate ventilation wear respiratory protection.

##### Thermal hazard

Not available.

##### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

#### SECTION 9: Physical and chemical properties

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

Physical state	solid
Colour	colourless
Odour	without fragrance
Melting point/freezing point	34 °C
Boiling point or initial boiling point and boiling range	960 °C
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	6.7 (undiluted)
Kinematic viscosity	data not available
Solubility in water	1400 g/l
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available
Relative vapour density	data not available

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9.2. <b>Other information</b>	Particle characteristics	data not available
	not available	

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

The substance is non-flammable.

##### 10.2. Chemical stability

The product is stable under normal conditions.

##### 10.3. Possibility of hazardous reactions

Unknown.

##### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

##### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

##### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

#### SECTION 11: Toxicological information

##### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the substance.

##### Acute toxicity

Toxic if swallowed. Fatal if inhaled.

##### Skin corrosion/irritation

Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

Based on available data the classification criteria are not met.

##### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

##### Germ cell mutagenicity

May cause genetic defects.

##### Carcinogenicity

May cause cancer.

##### Reproductive toxicity

May damage fertility. May damage the unborn child.

##### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

##### Toxicity for specific target organ - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

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#### Aspiration hazard

Based on available data the classification criteria are not met.

#### 11.2. Information on other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

#### 12.2. Persistence and degradability

No data available for the substance.

#### 12.3. Bioaccumulative potential

No data available for the substance.

#### 12.4. Mobility in soil

No data available for the substance.

#### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

#### 12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100.

#### 12.7. Other adverse effects

Not available.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

UN 2570

#### 14.2. UN proper shipping name

CADMIUM COMPOUND

#### 14.3. Transport hazard class(es)

6.1 Toxic substances

#### 14.4. Packing group

III

#### 14.5. Environmental hazards

not relevant

#### 14.6. Special precautions for user

not available

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#### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

##### Additional information

Hazard identification No.

60

UN number

2570

Classification code

T5

Safety signs

6.1+hazardous for the environment



Tunnel restriction code

(E)

##### Air transport - ICAO/IATA

Packaging instructions passenger

670

Cargo packaging instructions

677

##### Marine transport - IMDG

EmS (emergency plan)

F-A, S-A

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

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Restriction	Conditions of restriction
23	<p>For the purpose of this entry, the codes and chapters indicated in square brackets are the codes and chapters of the tariff and statistical nomenclature of Common Customs Tariff as established by Council Regulation (EEC) No 2658/87 (*).</p> <p>1. Shall not be used in mixtures and articles produced from the following synthetic organic polymers (hereafter referred to as plastic material):</p> <ul style="list-style-type: none"> <li>— polymers or copolymers of vinyl chloride (PVC) [3904 10] [3904 21]</li> <li>— polyurethane (PUR) [3909 50]</li> <li>— low-density polyethylene (LDPE), with the exception of low-density polyethylene used for the production of coloured masterbatch [3901 10]</li> <li>— cellulose acetate (CA) [3912 11]</li> <li>— cellulose acetate butyrate (CAB) [3912 11]</li> <li>— epoxy resins [3907 30]</li> <li>— melamine-formaldehyde (MF) resins [3909 20]</li> <li>— urea-formaldehyde (UF) resins [3909 10]</li> <li>— unsaturated polyesters (UP) [3907 91]</li> <li>— polyethylene terephthalate (PET) [3907 60]</li> <li>— polybutylene terephthalate (PBT)</li> <li>— transparent/general-purpose polystyrene [3903 11]</li> <li>— acrylonitrile methylmethacrylate (AMMA)</li> <li>— cross-linked polyethylene (VPE)</li> </ul>



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	<ul style="list-style-type: none"> <li>— high-impact polystyrene</li> <li>— polypropylene (PP) [3902 10]</li> </ul> <p>Mixtures and articles produced from plastic material as listed above shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,01 % by weight of the plastic material.</p> <p>By way of derogation, the second subparagraph shall not apply to articles placed on the market before 10 January 2012.</p> <p>The first and second subparagraphs apply without prejudice to Council Directive 94/62/EC (*) and acts adopted on its basis.</p> <p>By 19 November 2012, in accordance with Article 69, the Commission shall ask the European Chemicals Agency to prepare a dossier conforming to the requirements of Annex XV in order to assess whether the use of cadmium and its compounds in plastic material, other than that listed in subparagraph 1, should be restricted.</p> <p>2. Shall not be used or placed on the market in paints with codes [3208] [3209] in a concentration (expressed as Cd metal) equal to or greater than 0,01 % by weight.</p> <p>For paints with codes [3208] [3209] with a zinc content exceeding 10 % by weight of the paint, the concentration of cadmium (expressed as Cd metal) shall not be equal to or greater than 0,1 % by weight.</p> <p>Painted articles shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,1 % by weight of the paint on the painted article.</p> <p>3. By way of derogation, paragraphs 1 and 2 shall not apply to articles coloured with mixtures containing cadmium for safety reasons.</p> <p>4. By way of derogation, paragraph 1, second subparagraph shall not apply to:</p> <ul style="list-style-type: none"> <li>— mixtures produced from PVC waste, hereinafter referred to as "recovered PVC",</li> <li>— mixtures and articles containing recovered PVC if their concentration of cadmium (expressed as Cd metal) does not exceed 0,1 % by weight of the plastic material in the following rigid PVC applications:               <ul style="list-style-type: none"> <li>(a) profiles and rigid sheets for building applications;</li> <li>(b) doors, windows, shutters, walls, blinds, fences, and roof gutters;</li> <li>(c) decks and terraces;</li> <li>(d) cable ducts;</li> <li>(e) pipes for non-drinking water if the recovered PVC is used in the middle layer of a multilayer pipe and is entirely covered with a layer of newly produced PVC in compliance with paragraph 1 above.</li> </ul> </li> </ul> <p>Suppliers shall ensure, before the placing on the market of mixtures and articles containing recovered PVC for the first time, that these are visibly, legibly and indelibly marked as follows: "Contains recovered PVC" or with the following pictogram:</p> <p>In accordance with Article 69 of this Regulation, the derogation granted in paragraph 4 will be reviewed, in particular with a view to reducing the limit value for cadmium and to reassess the derogation for the applications listed in points (a) to (e), by 31 December 2017.</p> <p>5. For the purpose of this entry, "cadmium plating" means any deposit or coating of metallic cadmium on a metallic surface.</p> <p>Shall not be used for cadmium plating metallic articles or components of the articles used in the following sectors/applications:</p>

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	<p>(a) equipment and machinery for:</p> <ul style="list-style-type: none"> <li>– food production [8210] [8417 20] [8419 81] [8421 11] [8421 22] [8422] [8435] [8437] [8438] [8476 11]</li> <li>– agriculture [8419 31] [8424 81] [8432] [8433] [8434] [8436]</li> <li>– cooling and freezing [8418]</li> <li>– printing and book-binding [8440] [8442] [8443]</li> </ul> <p>(b) equipment and machinery for the production of:</p> <ul style="list-style-type: none"> <li>– household goods [7321] [8421 12] [8450] [8509] [8516]</li> <li>– furniture [8465] [8466] [9401] [9402] [9403] [9404]</li> <li>– sanitary ware [7324]</li> <li>– central heating and air conditioning plant [7322] [8403] [8404] [8415]</li> </ul> <p>In any case, whatever their use or intended final purpose, the placing on the market of cadmium-plated articles or components of such articles used in the sectors/applications listed in points (a) and (b) above and of articles manufactured in the sectors listed in point (b) above is prohibited.</p> <p>6. The provisions referred to in paragraph 5 shall also be applicable to cadmium-plated articles or components of such articles when used in the sectors/applications listed in points (a) and (b) below and to articles manufactured in the sectors listed in (b) below:</p> <p>(a) equipment and machinery for the production of:</p> <ul style="list-style-type: none"> <li>– paper and board [8419 32] [8439] [8441] textiles and clothing [8444] [8445] [8447] [8448] [8449] [8451] [8452]</li> </ul> <p>(b) equipment and machinery for the production of:</p> <ul style="list-style-type: none"> <li>– industrial handling equipment and machinery [8425] [8426] [8427] [8428] [8429] [8430] [8431]</li> <li>– road and agricultural vehicles [chapter 87]</li> <li>– rolling stock [chapter 86]</li> <li>– vessels [chapter 89]</li> </ul> <p>7. However, the restrictions in paragraphs 5 and 6 shall not apply to:</p> <ul style="list-style-type: none"> <li>– articles and components of the articles used in the aeronautical, aerospace, mining, offshore and nuclear sectors whose applications require high safety standards and in safety devices in road and agricultural vehicles, rolling stock and vessels,</li> <li>– electrical contacts in any sector of use, where that is necessary to ensure the reliability required of the apparatus on which they are installed.</li> </ul> <p>8. Shall not be used in brazing fillers in concentration equal to or greater than 0,01 % by weight. Brazing fillers shall not be placed on the market if the concentration of cadmium (expressed as Cd metal) is equal to or greater than 0,01 % by weight.</p> <p>For the purpose of this paragraph brazing shall mean a joining technique using alloys and undertaken at temperatures above 450 °C.</p> <p>9. By way of derogation, paragraph 8 shall not apply to brazing fillers used in defence and aerospace applications and to brazing fillers used for safety reasons.</p> <p>10. Shall not be used or placed on the market if the concentration is equal to or greater than 0,01 % by weight of the metal in:</p> <ul style="list-style-type: none"> <li>(i) metal beads and other metal components for jewellery making;</li> <li>(ii) metal parts of jewellery and imitation jewellery articles and hair accessories, including: <ul style="list-style-type: none"> <li>– bracelets, necklaces and rings,</li> <li>– piercing jewellery,</li> <li>– wrist-watches and wrist-wear,</li> <li>– brooches and cufflinks.</li> </ul> </li> </ul>

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	<p>11. By way of derogation, paragraph 10 shall not apply to articles placed on the market before 10 December 2011 and jewellery more than 50 years old on 10 December 2011.</p>
29	<p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> <li>– as substances,</li> <li>– as constituents of other substances, or,</li> <li>– in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:               <ul style="list-style-type: none"> <li>– either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>– the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products:               <ul style="list-style-type: none"> <li>– motor fuels which are covered by Directive 98/70/EC,</li> <li>– mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>– fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists’ paints covered by Regulation (EC) No 1272/2008;</li> <li>(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul>

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28	<p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> <li>— as substances,</li> <li>— as constituents of other substances, or,</li> <li>— in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:                             <ul style="list-style-type: none"> <li>— either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>— the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products:                             <ul style="list-style-type: none"> <li>— motor fuels which are covered by Directive 98/70/EC,</li> <li>— mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>— fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists’ paints covered by Regulation (EC) No 1272/2008;</li> <li>(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul>

## SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

### Cadmium chloride dihydrate

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Restriction	Conditions of restriction
30	<p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> <li>– as substances,</li> <li>– as constituents of other substances, or,</li> <li>– in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:                             <ul style="list-style-type: none"> <li>– either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,</li> <li>– the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008.</li> </ul> </li> </ul> <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;</li> <li>(b) cosmetic products as defined by Directive 76/768/EEC;</li> <li>(c) the following fuels and oil products:                             <ul style="list-style-type: none"> <li>– motor fuels which are covered by Directive 98/70/EC,</li> <li>– mineral oil products intended for use as fuel in mobile or fixed combustion plants,</li> <li>– fuels sold in closed systems (e.g. liquid gas bottles);</li> </ul> </li> <li>(d) artists’ paints covered by Regulation (EC) No 1272/2008;</li> <li>(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.</li> <li>(f) devices covered by Regulation (EU) 2017/745.</li> </ul>

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Restriction	Conditions of restriction
72	<p>1. Shall not be placed on the market after 1 November 2020 in any of the following:</p> <ul style="list-style-type: none"> <li>(a) clothing or related accessories;</li> <li>(b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing;</li> <li>(c) footwear;</li> </ul> <p>if the clothing, related accessory, textile other than clothing or footwear is for use by consumers and the substance is present in a concentration, measured in homogeneous material, equal to or greater than that specified for that substance in Appendix 12.</p> <p>2. By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0] in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be 300 mg/kg during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter.</p> <p>3. Paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> <li>(a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide;</li> <li>(b) non-textile fasteners and non-textile decorative attachments;</li> <li>(c) second-hand clothing, related accessories, textiles other than clothing or footwear</li> <li>(d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners.</li> </ul> <p>4. Paragraph 1 shall not apply to clothing, related accessories, textiles other than clothing, or footwear within the scope of Regulation (EU) 2016/425 of the European Parliament and of the Council (*) or Regulation (EU) 2017/745 of the European Parliament and of the Council (**).</p> <p>5. Paragraph 1(b) shall not apply to disposable textiles. 'Disposable textiles' means textiles that are designed to be used only once or for a limited time and are not intended for subsequent use for the same or a similar purpose.</p> <p>6. Paragraphs 1 and 2 shall apply without prejudice to the application of any stricter restrictions set out in this Annex or in other applicable Union legislation.</p> <p>7. The Commission shall review the exemption in paragraph 3(d) and, if appropriate, modify that point accordingly.</p> <p>(*) Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51).</p> <p>(**) Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (OJ L 117, 5.5.2017, p. 1).</p>

#### 15.2. Chemical safety assessment

No chemical safety assessment has been performed for this substance.

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No chemical safety assessment has been performed for this substance.

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No chemical safety assessment has been performed for this substance.

#### SECTION 16: Other information

##### A list of standard risk phrases used in the safety data sheet

H301	Toxic if swallowed.
H330	Fatal if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360FD	May damage fertility. May damage the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

##### Guidelines for safe handling used in the safety data sheet

P201	Obtain special instructions before use.
P260	Do not breathe dust/mist.
P273	Avoid release to the environment.
P284	Wear respiratory protection.
P310	Immediately call a doctor.

##### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

##### Key to abbreviations and acronyms used in the safety data sheet

Acute Tox.	Acute toxicity
ADR	European agreement concerning the international carriage of dangerous goods by road
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
BCF	Bioconcentration Factor
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals



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ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
log Kow	Octanol-water partition coefficient
Muta.	Germ cell mutagenicity
OEL	Occupational Exposure Limits
PBT	Persistent, bioaccumulative and toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity
RID	Agreement on the transport of dangerous goods by rail
STOT RE	Specific target organ toxicity - repeated exposure
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very persistent and very bioaccumulative

#### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### Recommended restrictions of use

not available

#### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### The changes (which information has been added, deleted or modified)

The version 3.0 replaces the SDS version from Thursday, 10 November 2022. Changes were made in sections 1, 2, 11, 12, 13, 15 and 16.

#### More information

Classification procedure - calculation method.

#### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.