



S a f e t y D a t a S h e e t
According to Regulation (EC) 1907/2006

131205 Cadmium Chloride 2,5-hydrate PA-ACS

1. Identification of the substance/preparation and of the company or firm

1.1 Identification of the substance or preparation

Name:

Cadmium Chloride 2,5-hydrate

1.2 Use of the substance/preparation:

For laboratory utilisation, analysis, research and fine chemistry.

1.3 Identification of the company or firm:

PANREAC QUIMICA, S.L.U.

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Emergencies:

Single telephone number for emergency calls: 112 (EU)

Tel.:(+34) Tel.:(+34) 937 489 499

2. Identification of dangers

May cause cancer. May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child. Also toxic if swallowed. Also very toxic by inhalation. Also toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

"Restricted to professional users" as specified in Directive 97/56/EC.

3. Component Composition/Information

Name: Cadmium Chloride 2,5-hydrate

Formula: $\text{CdCl}_2 \cdot 2,5\text{H}_2\text{O}$ M.=228,34 CAS [10108-64-2]

EC number (EINECS): 233-296-7

EC index number: 048-008-00-3

4. First aid

4.1 General indications:

Never provide drink or induce vomiting in the event of loss of consciousness.

4.2 Inhaling:

Take the person out into the fresh air. In the event sickness persists, seek medical assistance.

4.3 Contact with the skin:

Wash with plenty of water. Remove contaminated clothing.

4.4 Eyes:

Wash with plenty of water (for at least 15 minutes), keeping eyelids open. In the event of irritation, seek medical assistance.

4.5 Swallowing:

Drink large amounts of water. Induce vomiting. Seek immediate medical assistance.

5. Fire-fighting means

5.1 Suitable fire-extinguishing means:

As appropriate to the environment.

5.2 Fire-fighting means which must NOT be used:

5.3 Special risks:

Incombustible. In the event of fire, toxic fumes may form.

5.4 Protective equipment:

6. Measures to be taken in the event of accidental spillage

6.1 Individual precautions:

Do not inhale the dust.

6.2 Precautions for care of the environment:

Do not allow it to enter the drainage system. Avoid pollution of the soil, water supplies and drains.

6.3 Methods for collection/cleaning:

Collect up dry and deposit in waste containers for subsequent elimination in accordance with current legislation. Clean any remains with plenty of water.

7. Handling and storage

7.1 Handling:

No special indications.

7.2 Storage:

Well sealed containers. In well ventilated premises. Atmospheric temperature. Restricted access, only authorized to technicians.

8. Staff exposure/protection controls

8.1 Technical protective measures:

8.2 Exposure limit control:

8.3 Respiratory protection:

If dust forms, use suitable respiratory protection. Filter P₃.

8.4 Hand protection:

Use suitable gloves

8.5 Eye protection:

Use suitable goggles.

8.6 Individual hygiene measures:

Remove contaminated clothing. Wash hands and face before breaks and when the job is done. Avoid the formation of dust. Do not inhale the substance.

8.7 Environmental exposure controls:

Fulfill the commitments under local environmental protection legislation.

The supplier of the protection equipment must specify the type of protection to be worn when handling the substance or preparation, including the type of material and the breakthrough time of the material, with regard to the amount and duration of exposure.

9. Physical and chemical properties

Appearance:

White crystals.

Odour:

Odourless.

pH X6,7(50g/l)

Melting point: 34°C

Density (20/4): X3,32

Solubility: 1680 g/l in water at 20°C

10. Stability and reactivity

10.1 Conditions which should be avoided:

High temperatures.

10.2 Matter which should be avoided:

Alkaline metals. Boron trifluoride.

10.3 Hazardous decomposition products:

Toxic gases.

10.4 Complementary information:

11. Toxicological information

11.1 Acute toxicity:

LD₅₀ oral rat: 194 mg/kg

LD₅₀ intraperitoneal mouse: 4,567 mg/kg

Subacute to chronic toxicity:

There are no definite objective conclusions regarding the carcinogenic effect of this substance.

11.2 Dangerous effects for health:

If dust inhaled: breathing difficulties, coughing. After a period of latency: pulmonary oedema.

If swallowed: nausea, vomiting, stomach pains.

Systemic effects: blood alterations, hepatic problems, kidney problems. Damaging to the bone marrow. Chronic effects: breathing difficulties.

12. Environmental information

12.1 Mobility:

12.2 Ecotoxicity:

12.1.1 - EC₅₀ test (mg/l):

Bacteria (Photobacterium phosphoreum) = 17 mg/l ; Classification: Extr. toxic

Bacteria (E. coli) = EC₀ 0,15 mg/l ; Classification: Extr. toxic

Crustaceans (Daphnia magna) = EC₀ 0,1 mg/l ; Classification: Extr. toxic

Algae (Sc. quadricauda) = EC₀ 0,1 mg/l ; Classification: Extr. toxic

12.2.2 - Receptor medium:

Risk for the water environment = High

Risk for the land environment = High

12.2.3 - Observations:

Toxic product in any environment. Ecotoxicity acute and chronic.

12.3 Degradability:

12.3.1 - Test:-----

12.3.2 - Biotic degradation classification:

BOD₅/COD Biodegradability = -----

12.3.3 - Abiotic degradation depending on pH: -----

12.3.4 - Observations:

12.4 Accumulation:

12.4.1 - Test:

12.4.2 - Bioaccumulation:

Risk = -----

12.4.3 - Observations:

Danger due to bioaccumulation of cadmium.

12.5 Other possible effects on the environment:

High pollutant product. Dangerous for drinking water. Do not allow it to enter soils or water channels.

13. Considerations regarding elimination

13.1 Substance or preparation:

In the European Union, there are no homogeneous standards established for elimination of chemical waste, which is waste of a special nature, and treatment and elimination of same is subject to the domestic legislation in each country. In view of this, in each case, you should contact the competent authority or those companies legally authorized for elimination of waste.

2001/573/EC: Council Decision of 23 July 2001 amending Commission Decision 2000/532/EC as regards the list of wastes.

Council Directive 91/156/EEC of 18 March 1991 amending Directive 75/442/EEC on waste.

13.2 Contaminated containers:

Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

14. Information concerning transport

Overland (ADR):

Technical name: COMPUESTOS DE CADMIO

ONU 2570 Class: 6.1 Packaging group: III (E)

By sea (IMDG):

Technical name: COMPUESTOS DE CADMIO

ONU 2570 Class: 6.1 Packaging group: III

By air (ICAI-IATA):

Technical name: Cadmio, compuesto de

ONU 2570 Class: 6.1 Packaging group: III

Packaging instructions: CAO 619 PAX 619

15. Mandatory information

15.1 Labelling as per REACH

Symbols: The image shows two GHS hazard symbols side-by-side. The left symbol is labeled 'T+' and depicts a skull and crossbones. The right symbol is labeled 'N' and depicts a dead tree and a dead fish.

Danger indications: Very toxic Dangerous for the environment

Phrases R: 45-46-60-61-E25-E26-E48/23/25-50/53 May cause cancer. May cause heritable genetic damage. May impair fertility. May cause harm to the unborn child. Also toxic if swallowed. Also very toxic by inhalation. Also toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Phrases S: 53-45-60-61 Avoid exposure-obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions-safety data sheet.

EC index number: 048-008-00-3

16. Other information

Review number and date:6 07.06.09

In respect of the previous review, changes have been made to the following sections: 15. The information included in this Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.