



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Cadmium chloride**  
PRODUCT NUMBER: 1342  
CAS NUMBER: 10108-64-2  
SYNONYMS: Cadmium dichloride, Dichlorocadmium

### MANUFACTURER:

Prochem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

PHONE: 815-398-1788  
FAX: 815-398-1810  
TOLL FREE: 800-795-8788

IN CASE OF TRANSPORTATION EMERGENCY CONTACT CHEM-TREC: 1-800-424-9300

## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H301	Toxic if swallowed.
H330	Fatal if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

### Precautionary Phrases

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid released to the environment.
P281	Use personal protective equipment as required.
P284	Wear respiratory protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P330	Rinse mouth.

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

### HMIS CLASSIFICATION:

Health: 4      Chronic: \*      Fire: 0      Reactivity Hazard: 0

### NFPA RATING:

Health: 4      Flammability: 0      Reactivity Hazard: 0

**EYE CONTACT:** May be a mild to severe irritant to the eyes.

**SKIN CONTACT:** May cause slight to mild irritation of the skin.

**INHALATION:** Inhalation of dust and fumes can lead to cough, headache, shortness of breath, chest pains, pulmonary edema, and death.

**INGESTION:** Ingestion may lead to sudden nausea, vomiting, bloody diarrhea, weakness, convulsions, and death.

**CHRONIC HEALTH EFFECTS:** Prolonged exposure to low concentrations of cadmium may result in kidney damage, anemia, pulmonary fibrosis, emphysema, perforation of the nasal septum, loss of smell, male reproductive effects, and an increased risk of cancer of the prostate, lungs, and liver.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: CdCl<sub>2</sub>

Molecular Weight: 183.32

CHEMICAL NAME	CAS#	%
Cadmium Chloride	10108-64-2	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases, seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen chloride and cadmium oxides

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation. Avoid the formation of dust. Avoid breathing vapors, mist, gas, or dust.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Pick up and arrange disposal without creating dust. Sweep up and keep in suitable, closed containers for disposal.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Use with adequate ventilation. Avoid contact with skin and eyes. Avoid formation of dust. Handle under inert gas. Protect from moisture. Air sensitive  
**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Hygroscopic. Store under inert gas.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

### EXPOSURE CONTROLS:

Component	Exposure Limits	Basis	Entity
Cadmium Chloride Anhydrous	0.0020 mg/m <sup>3</sup>	TWA	ACGIH
	0.1 mg/m <sup>3</sup>	TWA	ACGIH
	0.005 mg/m <sup>3</sup>	PEL	OSHA

TWA: Time Weighted Average over 8 hours of work.

PEL: Permissible Exposure Limit

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield.

**SKIN PROTECTION:** Wear nitrile or rubber gloves, apron, or lab coat.

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator.

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** White solid

**ODOR:** None

**MOLECULAR WEIGHT:** 183.32

**BOILING POINT:** 960° C

**MELTING POINT:** 568° C

**SPECIFIC GRAVITY:** 4.047 gm/ml

**SOLUBILITY:** Soluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Avoid moisture and air

**INCOMPATIBILITY:** Oxidizing agents and bromine trifluoride

**DECOMPOSITION PRODUCTS:** Hydrogen chloride and cadmium oxide

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** LD50 Oral – rat – male - 107 mg/kg. LC50 Inhalation – Rat – male – 2h-> 4.5 mg/m<sup>3</sup>.

**CARCINOGENIC EFFECTS:** Carcinogenicity – Rat – male and female – Inhalation. Lungs, Thorax, or Respiration: Tumors. Human carcinogen.

**MUTAGENIC EFFECTS:** Not available

**TETRATOGENIC EFFECTS:** Not available

**RTECS:** EV0175000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

**TOXICITY TO FISH:** Flow-through test LC50 – Pimephales promelas (fathead minnow) – 1,500 mg/l/96 h.

**TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES:** Static test EC50 – Daphnia magna (water flea) – 0.036 mg/l – 48 h.

**TOXICITY TO ALGAE:** Static test EC50 – Pseudokirchneriella subcapitata (algae) – 0.070 mg/l – 72 h

**TOXICITY TO BACTERIA:** Respiration inhibition NOEC – Sludge Treatment – 0.2 mg/l.

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## SECTION 14 TRANSPORTATION DATA

<b>DOT:</b> UN2570	<b>IATA:</b> UN2570
Cadmium compounds	Cadmium compound
(Cadmium chloride)	(Cadmium chloride)
Class 6.1	Class 6.1
PG III	PG III

Marine Pollutant: No

## SECTION 15 REGULATORY INFORMATION

**TSCA:** Listed in the TSCA inventory

**SARA 302/304:** Not listed

**SARA 311/312:** Acute Health Hazard, Chronic Health Hazard

**SARA (TITLE 313):** Cadmium chloride

**MASSACHUSETTS RIGHT TO KNOW:** Cadmium chloride

**PENNSYLVANIA RIGHT TO KNOW:** Cadmium chloride

**NEW JERSEY RIGHT TO KNOW:** Cadmium chloride

**CALIFORNIA PROP. 65:** WARNING! Cadmium chloride is known to cause cancer.

## SECTION 16 OTHER INFORMATION

**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, Prochem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

**DATE PREPARED:** 11/14