

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 187.00

Revision Date: December 7, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Cadmium Chloride

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261  
CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Cadmium chloride

CAS#: 10108-64-2

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### SECTION 3 — HAZARDS IDENTIFICATION

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Fine, white to colorless crystals. Odorless.  
Known human carcinogen (IARC-1). Avoid this substance on school premises.  
Avoid breathing dust. Highly toxic if swallowed or inhaled. Irritant to body tissue.  
When heated to decomposition, emits very toxic fumes of Cd and Cl.

#### FLINN AT-A-GLANCE

Health-3  
Flammability-0  
Reactivity-0  
Exposure-3  
Storage-1

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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Call a physician and seek medical attention for further treatment, observation, and support after first aid.  
Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.  
Eye or External: Immediately flush with fresh water for at least 15 minutes.  
Internal: Rinse mouth. Give large quantities of water for dilution. Induce vomiting. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Nonflammable solid except as dust.  
When heated to decomposition, emits very toxic fumes of Cd and Cl.  
**Fire Fighting Instructions:** Use a triclass, dry chemical fire extinguisher. Firefighters should wear PPE and SCBA with full facepiece operated in positive pressure mode.

**NFPA CODE**  
None  
established

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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### SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates. Store in a cool, dry place. Store in a Flinn Chem-Saf bag. Use and dispense in a hood.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).  
Exposure guidelines: PEL 0.2 mg/m<sup>3</sup> (as Cd) (OSHA)

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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Fine, white to colorless crystals. Odorless.  
Solubility: Water soluble. Acetone soluble.  
Formula:  $\text{CdCl}_2 \cdot \frac{1}{2} \text{H}_2\text{O}$   
Formula weight: 228.34

Melting point: 568 °C  
Specific gravity: 3.327

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**SECTION 10 — STABILITY AND REACTIVITY**

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Avoid the use of this substance on school premises unless you expect to practice strict hygiene in your school laboratory. This substance is **not** for student use. Avoid contact with strong oxidizers. Reacts violently with potassium.  
Shelf life: Indefinite, if stored properly.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Highly toxic, nausea, headache, and vomiting.  
Chronic effects: Carcinogen, teratogen, and mutagen.  
Target organs: Kidneys and lungs.

ORL-RAT LD<sub>50</sub>: 88 mg/kg  
IHL-RAT LC<sub>50</sub>: 2300 mg/m<sup>3</sup>  
SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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Please review all federal, state and local regulations that may apply, before proceeding.  
Flinn Suggested Disposal Method #27f is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Cadmium Compounds  
Hazard class: 6.1, Keep away from food  
UN number: UN2570  
N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (233-296-7), RCRA code D006.

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**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**