

FLINN SCIENTIFIC, INC.

Material Safety Data Sheet (MSDS)

MSDS #: 185.00

Revision Date: October 28, 2010

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Cadmium

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

Cadmium

CAS#: 7440-43-9

SECTION 3 — HAZARDS IDENTIFICATION

Silvery, lustrous metal. Metal tarnishes in moist air. Odorless.

Known carcinogen (IARC-1).

Highly toxic by ingestion and inhalation. Avoid breathing dust. Body tissue irritant.

Fire hazard in dust form. When heated to a high temperature, it emits toxic fumes of Cd.

FLINN AT-A-GLANCE

Health-3

Flammability-0

Reactivity-0

Exposure-3

Storage-2

0 is low hazard, 3 is high hazard

SECTION 4 — FIRST AID MEASURES

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: Immediately flush with fresh water for at least 15 minutes.

External: Wash continuously with fresh water for at least 15 minutes.

Internal: Rinse out mouth, give 1 to 2 cups of water or milk, and induce vomiting. Call a physician or poison control at once.

SECTION 5 — FIRE FIGHTING MEASURES

Noncombustible solid in bulk form, but fire hazard in dust form.

When heated to a high temperature, it emits toxic fumes of Cd.

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

SECTION 6 — ACCIDENTAL RELEASE MEASURES

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.

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Inorganic #1. Store with metals and metal hydrides.

Store in a cool, dry place. Store in a Flinn Saf-Stor can. Use and dispense in a hood.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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: TWA 0.2 mg/m³ (OSHA)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Silvery, lustrous metal. Metal tarnishes in moist air. Odorless. Specific Gravity: 8.65
Solubility: Insoluble in water. Soluble in acids, especially nitric acid. Melting Point: 321 °C
Soluble in ammonium nitrate solutions.
Formula: Cd
Formula Weight: 112.40

SECTION 10 — STABILITY AND REACTIVITY

Avoid contact with oxidizers, acids, and potassium. Avoid as fume or dust. Avoid use entirely on school premises unless you expect to practice strict hygiene.
Shelf life: Indefinite.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: Highly toxic. Stomach pains, vomiting, diarrhea, lung irritation, chest pain, and edema, which may be fatal. ORL-RAT LD₅₀: 225 mg/Kg
Chronic effects: Carcinogen. IHL-RAT LC₅₀: 25 mg/m³/30 m
Target organs: Lungs and kidneys. SKN-RBT LD₅₀: N.A.

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

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please consult with state and local regulations.
Flinn Suggested Disposal Method #27d is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping Name: Cadmium Compounds
Hazard Class: 6.1, Keep away from food
UN Number: UN2570
N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

TSCA-listed, EINECS-listed (231-152-8), RCRA code D006.

SECTION 16 — OTHER INFORMATION

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