

MATERIAL SAFETY DATA SHEET

24 HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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SECTION 1 Product Identification

CHEMICAL NAME: Cadmium shot
CAS #: 7440-43-9
FORMULA: Cd
SYNONYM: Kadmium

SECTION 2 Composition and Information on Ingredients

INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	7440-43-9	100	0.01mg/m3 (as Cd)	0.2mg/m3 (as Cd dust)

SECTION 3 Hazards Identification

EMERGENCY OVERVIEW: Oral toxicity of any dust present is high. The inhalation of cadmium dust can lead to toxic effects on the respiratory tract and the kidneys. Causes cancer.

PRIMARY ROUTES OF EXPOSURE: Inhalation

EYE CONTACT: Dust, if present, may cause irritation, pain, and smarting of the eyes.

SKIN CONTACT: Dust, if present, may cause irritation of the skin.

INHALATION: Inhalation of any dust or fumes can lead a cough, headache, shortness of breath, chest pains, and pulmonary edema.

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

CHRONIC HEALTH EFFECTS: Prolonged exposure may cause loss of sense of smell, weight loss, liver, lung, skeletal and kidney damage. Cadmium is a recognized carcinogen of the connective tissue, lungs and the liver. It shows toxicity to reproductive processes in ammonals.

ACUTE HEALTH EFFECTS: Dust may be severely irritating to the respiratory tract. High concentrations of dust can be fatal. Acute gastrointestinal reaction.

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 the victim to fresh air. 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: not applicable

AUTO IGNITION TEMPERATURE: 570°C

EXPLOSION LIMITS: not applicable

EXTINGUISHING MEDIUM: Class D metal fire agent, dry salt or sand

SPECIAL FIREFIGHTING PROCEDURES: If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS: burning metal will produce toxic fumes of cadmium oxide. May form flammable hydrogen with water.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Combustible solid. Dust, if formed, may create weakly explosive mixtures with air.

SECTION 6 Accidental Release Measures

SPILL AND LEAK PROCEDURES: In the case of a spill, the material should be covered with dry soda ash, limestone, or sand. Sweep up and place in a closed container.

SECTION 7 Handling and Storage

HANDLING AND STORAGE: Store material in a tightly sealed container .

SECTION 8 Exposure Controls and Personal Protection

EYE PROTECTION: Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

SKIN PROTECTION: Chemical-resistant.

VENTILATION: If possible, handle the material in an efficient fume hood.

RESPIRATOR: If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

SECTION 9 Physical and Chemical Properties

COLOR AND FORM: tear drop

MOLECULAR WEIGHT: 112.41

MELTING POINT (DEG. C.): 570°C (dust)

BOILING POINT: 765°

VAPOR PRESSURE: no data

SPECIFIC GRAVITY: 8.642

SOLUBILITY IN WATER: insoluble

SECTION 10 Stability and Reactivity

STABILITY: air and moisture stable

HAZARDOUS POLYMERIZATION: no hazardous polymerization

CONDITIONS TO AVOID: (For dust) Mixtures of fine dust with air. Contact with an ignition source.

INCOMPATIBILITY: mineral acids, halogens

DECOMPOSITION PRODUCTS: none

SECTION 11 Toxicological Information

RTECS DATA: Inhalation (Human-man); TCLo: 88 ug/m³/8.6Y. Inhalation (Human); LCLo: 39 mg/m³/20M. Unreported (Human-man); LDLo: 15 mg/kg. Oral (rat); LD50: 2330 mg/kg. Inhalation (rat); LC50: 25 mg/m³/30M. Intraperitoneal (mouse); LD50 5700 ug/kg. Oral (rat); TDLo: 546 mg/kg/26W-C. Inhalation (Human-woman); TCLo: 129 ug/m³/20Y-C. Subcutaneous (rat); TDLo: 3372 ug/kg. Intramuscular (rat); TO: 70 mg/kg. Oral (rat); TDLo: 155 mg/kg.

MUTAGENIC EFFECTS: no data

TETRATOGENIC EFFECTS: no data

CARCINOGENIC EFFECTS: no data

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

SECTION 12 Ecological Information

ECOLOGICAL INFORMATION: No information available

SECTION 13 Disposal Considerations

DISPOSAL: Dispose of in according to local state and federal regulations.

SECTION 14 Transportation Information

Cadmium compounds, Class 6.1, UN2570, PG I

SECTION 15 Regulatory Information

TSCA: Listed in the TSCA inventory

SARA (TITLE 313): Title compound not listed

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.

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