

CADMIUM IODIDE

1. Product Identification

Synonyms: None.

CAS No.: 7790-80-9

Molecular Weight: 366.22

Chemical Formula: CdI_2

Product Codes: 30550

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
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Cadmium iodide	7790-80-9	90 - 100%

3. Hazards Identification

Potential Health Effects

Inhalation: Cadmium absorption is most efficient via respiratory tract. Inhalation of dust may produce irritation, headache, metallic taste and/or cough. Severe exposures may produce shortness of breath, chest pain, and flu-like symptoms with weakness, fever, headache, chills, sweating, nausea and muscular pain.

Ingestion: Toxic. Ingested cadmium salts may cause severe and sometimes fatal poisonings. Symptoms can include severe nausea, vomiting, diarrhea, abdominal pains, choking, dizziness, and salivation. Kidney and liver dysfunction may occur. Although as little as 10 - 20 mg of soluble cadmium salts have produced severe toxic symptoms when ingested, death probably requires several hundred mg by oral route.

Skin Contact: May cause irritation, redness, and pain.

Eye Contact: May cause irritation, redness and pain.

Chronic Exposure: Chronic exposure to cadmium, even at relatively low concentrations, 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 lung and of the prostate.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders, eye problems, blood disorders, prostate problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Wipe off excess material from skin then immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.



5. Fire Fighting Measures

Fire: Not considered to be a fire hazard.

Explosion: Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. If involved in a fire, this material can emit very toxic fumes of cadmium.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage.

Wear special protective equipment (Sec. 8) for maintenance break-in or where exposures may exceed established exposure levels. Wash hands, face, forearms and neck when exiting restricted areas. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded, a half-face high efficiency dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece high efficiency dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest.

Skin Protection: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance: Lustrous white flake-like crystals.

Odor: Odorless.

Solubility: Soluble in water.

Specific Gravity: 5.67

pH: No information found.

% Volatiles by volume @ 21C (70F): 0

Boiling Point: 787C (1449F)

Melting Point: 388C (730F)

Vapor Density (Air=1): No information found.

Vapor Pressure (mm Hg): No information found.

Evaporation Rate (BuAc=1): No information found.

10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

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Hazardous Decomposition Products:

Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

Hazardous Polymerization: Will not occur.

Incompatibilities: Potassium.

Conditions to Avoid: Dusting and incompatibles.

11. Toxicological Information

Toxicological Data: Oral rat LD50: 222 mg/kg. Investigated as a tumorigen and a reproductive effector.

Reproductive Toxicity: Other cadmium compounds are related to teratogenic and reproductive system effects.

12. Ecological Information

Environmental Fate: No information found.

Environmental Toxicity: No information found.

13. Disposal Considerations

Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

LAND

Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA Number: UN2570

Packaging Group: III

D.O.T. information reported for product/size: 125G

International (I.M.O.)

Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA Number: UN2570

Packaging Group: III

D.O.T. information reported for product/size: 125G

Air (I.C.A.O.)

Proper Shipping Name: CADMIUM COMPOUNDS

Hazard Class: 6.1

UN/NA Number: UN2570

Packaging Group: III

D.O.T. information reported for product/size: 125G

15. Regulatory Information

SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No

Reactivity: No (Pure / Solid)

16. Other Information

Product Use:

Laboratory Reagent

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