A MATERIAL SAFETY DATA SHEET

CADMIUM IODIDE

1.1 Product Identifiers:

Product Name : Cadmium iodide
CAS No : 7790-80-9

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Supplier: Infinium Pharmachem Pvt. Ltd. (AN ISO 9001:2008 CERTIFIED CO.)
38, G.I.D.C, Sojitra
Dist: ANAND
Gujarat, India

Tel : 0091-2697-234987
Fax : 0091-2697-234987
Email : info@infiniumpharmachem.com

Synonyms : Cadmium fume; Cadmium monoxide; Kadmu tlenek;

CAS No. : 7790-80-9
Molecular Weight : 366.22 g/mol
Chemical Formula : CdI₂
3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Carcinogenicity (Category 2), H351
Specific target organ toxicity - repeated exposure (Category 2), H373
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

N Dangerous for the environment R50/53
R33
T Toxic R23/25
Xn Harmful R68

For the full text of the R-phrases mentioned in this Section, see Section 16.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram
Signal word Danger
Hazard statement(s)
H301 + H331 Toxic if swallowed or if inhaled
H351 Suspected of causing cancer.
H373  May cause damage to organs through prolonged or repeated exposure.

H410  Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261  Avoid breathing dust.

P273  Avoid release to the environment.

P281  Use personal protective equipment as required.

P301 + P310 IF SWALLOWED:  Immediately call a POISON CENTER or doctor/physician.

P311  Call a POISON CENTER or doctor/physician.

P501  Dispose of contents/container to an approved waste disposal plant.

Supplemental Hazard  none

Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
no data available

5.1 Extinguishing Media:

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture
Hydrogen iodide, Cadmium/cadmium oxides

5.3 Advice for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further Information
no data available

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7.1 Precautions for safe Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe Storage, including any incompatibilities


7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8.1 Control parameters

Components with workplace control Parameters.

8.2 Exposure Controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9.1 Information on Basic physical & chemical properties

a) Appearance
Form: solid
Colour: white

b) Odor
no data available

c) Odor Threshold
no data available

d) pH
no data available

e) Melting point/freezing Point
Melting point/range: 388 °C - lit.

f) Initial boiling point and Boiling range
787 °C - lit.

g) Flash point
no data available

h) Evaporation rate
no data available

i) Flammability (solid, gas)
no data available

j) Upper/lower Flammability or explosive limits
no data available

k) Vapor pressure
no data available

l) Vapor density
no data available
m) Relative density 5.67 g/mL at 25 °C
n) Water solubility no data available
o) Partition coefficient: n-octanol/water no data available
p) Auto ignition Temperature no data available
q) Decomposition Temperature no data available
r) Viscosity no data available
s) Explosive properties no data available
t) Oxidizing properties no data available

9.2 Other safety Information

no data available

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Avoid moisture. Light.

10.5 Incompatible materials

Oxidizing agents.

10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 222 mg/kg
Skin corrosion/irritation
no data available.

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification. Chronic exposure to cadmium may cause lung and prostate cancer.

Limited evidence of carcinogenicity in animal studies
IARC: 1 - Group 1: Carcinogenic to humans (Cadmium iodide)

Reproductive toxicity
Reproductive toxicity - Rat - Oral
Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4). Effects on Newborn: Growth statistics (e.g., reduced weight gain).
Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Developmental Toxicity - Rat - Oral
Effects on Embryo or Fetus: Maternal-fetal exchange. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Cardiovascular (circulatory) system.

Specific target organ toxicity - single exposure
No data available

Specific target organ toxicity - repeated exposure
May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard
Additional Information

RTECS: EV1290000

Acute inhalation exposure to cadmium fumes may cause "metal fume fever" with flu-like symptoms of weakness, fever, headache, chills, nausea, vomiting, dizziness, sweating, muscular pain, cough and difficulty breathing. Acute pulmonary edema may develop within 24 hours and reaches a maximum by three days. The first chronic effect of exposure to cadmium is generally kidney damage, manifested by excretion of excessive protein in the urine, followed by anemia, teeth discoloration and loss of smell. Cadmium also is believed to cause pulmonary emphysema and bone disease.

12.1 Persistence and degradability

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### 14.1 UN number

ADR/RID: -2570  
IMDG: -2570  
IATA: -2570

#### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods  
IMDG: Not dangerous goods  
IATA: Not dangerous goods

#### 14.3 Transport hazard class(es)

ADR/RID: -6.1  
IMDG: -6.1  
IATA: -6.1

#### 14.4 Packaging group

ADR/RID: -III  
IMDG: -III  
IATA: -III

#### 14.5 Environmental hazards

ADR/RID: no  
IMDG Marine pollutant: no  
IATA: no

#### 14.6 Special precautions for user

no data available

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

#### 15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

**Full text of H-Statements referred to under sections 2 and 3.**

| Acute Tox. | Acute toxicity |
| Aquatic Acute | Acute aquatic toxicity |
| Aquatic Chronic | Chronic aquatic toxicity |
| Carc. | Carcinogenicity |
| H301 | Toxic if swallowed. |
| H301 + H331 | Toxic if swallowed or if inhaled |
| H331 | Toxic if inhaled. |
| H351 | Suspected of causing cancer. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |

**Full text of R-phrases referred to under sections 2 and 3**

| N | Dangerous for the environment |
| T | Toxic |
| R23/25 | Toxic by inhalation and if swallowed. |
| R33 | Danger of cumulative effects. |
| R50/53 | Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. |
| R68 | Possible risk of irreversible effects. |

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