

GHS Material Safety Data Sheet

MSDS No. :CDI01PAEG

Date issued:2010/02/05

Section 1. Identification of the substance or mixture and of the supplier

1.1 Product Information

Product name: CdTe; Cadmium telluride

Product number:	CDI07PB	—	—
Purity, Form,Size	5N,P,—	—,G, various sizes	—,R, various sizes
Product number:	—		
Purity, Form,Size	—,T, various sizes		

P;powder, G;grains, R;rod,tablet, T;target

1.2 Company Information:

Manufacturer : Kojundo Chemical Laboratory Co., Ltd.

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Section 2. Hazards identification

GHS Classification :

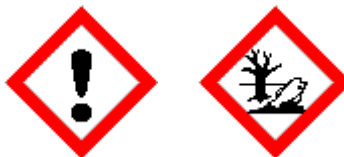
This GHS classification utilized “EU classification”results as reference.

EU classification:The classification and categorization adopted in Annex of Council

Directive 67/548/EEC

Health Hazards	Environmental Hazards	Physical Hazards
Acute toxicity (Oral,Dermal,Inhalation): Category4	Hazardous to the aquatic environment, acute toxicity: Category1 chronic toxicity: Category 1	No data available

GHS Label: W,V



Pictograms or symbols

Warning word: WARNING	
Hazard information	Description of precaution
Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.	Wear protective gloves/protective clothing/ eye protection/ respiratory protection / face protection during handling. Avoid breathing dust/fume/vapors. Do not eat, drink or smoke when using this product, and wash hands thoroughly after handling. Take off the contaminated clothing and wash before reuse. Use only outdoors or in well-ventilated area. Avoid release to the environment and collect spillage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor /

	<p>physician. Rinse mouth.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>IF ON SKIN: Remove immediately all contaminated clothing and rinse skin with water/shower. Then wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell.</p> <p>Dispose of contents/ container in accordance with local/national regulations.</p>
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Additional hazard information :

Heating and contact with acids may liberate toxic gases or fumes.

With respect to additional hazard information, see Section 11.

Section 3. Composition / information on ingredients
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Chemical or common name:	Cadmium telluride
Chemical formula:	CdTe
Single Substance or Compound:	Single substance
Composition:	100%
CAS #:	1306-25-8
RTECS#:	EV3330000
TSCA:	listed
EINECS:	2151499

(See Section 8 for Exposure Limits)

Section 4. First aid measures

Eye contact:	Promptly rinse eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact:	Remove immediately all contaminated clothing. Wipe off the product immediately by tissue or soft cloth, etc. Promptly flush contaminated skin with soap or mild detergent and water. Contact physician if irritation continues.
Ingestion:	Rinse mouth and throat with water. Get medical attention immediately.
Inhalation:	Remove the exposed person immediately and provide fresh air. Get medical attention.

Section 5. Fire fighting measures
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Extinguishing media:	Nonflammable, substance itself does not burn but may decompose upon heating to produce toxic gases and fumes. Chemical foam, Carbon dioxide, Dry chemical powder, Water fog or foam.
Fire fighting:	Remove containers to safe place if possible. Protective equipment should be used, if the material is involved in fire.

Section 6. Accidental release measures

Personal Precaution:	Workers should use protective wears to prevent contact with the spilt adhesive and inhalation of its dust.
Environmental hazard precaution:	Shut off leak if without risk. Prevent flow out to river, etc. so as not to badly affect.
Methods for containment and cleaning up:	Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Wear disposable coveralls and discard them after use. Avoid unnecessary contacts with spills. Indoor leakage: Ventilate as much as possible until the cleaning is completed. Outdoor leakage: Work from the windward and evacuate the leeward crowd. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Carefully wash spill site with plenty of water after material pick up.

Section 7. Handling and storage

Precautions to be taken in handling:

Safe handling:	Avoid creating dust. Do not breathe dust. Keep container or bottle tightly closed when not in use. Avoid prolonged or repeated exposure. Handling worker wears suitable protective clothing.
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Precautions to be taken in storage:

General precautions:	Store in a cool, dry place. Keep container tightly closed.
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Section 8. Exposure controls / personal protection

Exposure guideline:

Listed substance	ACGIH(TLV-TWA) mg/m ³	OSHA(PEL-TWA) mg/m ³
Cadmium compounds(as Cd)	0.01, 0.002(r)	0.005
Tellurium compounds(as Te)	0.1	0.1

r:Respirable Particulate

Facility measures:	Local ventilation of closed work room or total proper ventilation to prevent inhalation.
Protective ware:	Wear appropriate NIOSH/MSHA-approved respirator, safety goggles, impervious gloves, protective wear, protective boots.

Section 9. Physical and chemical properties

Chemical Name:	Cadmium telluride
Color and Form:	Black / solid
Formula:	CdTe
Molecular Weight:	240.0
Melting Point:	1041
Boiling Point:	—
Density:	6.2 g/cm ³
Solubility/H ₂ O:	insoluble
Flammable:	Nonflammable
Oxidation:	None

Section 10. Stability and reactivity

Stability:	Stable when stored in a sealed container at room temperature.
Reactivity Incompatibility:	Strong oxidizing agents, water, moisture
Hazard decomposition products:	Cadmium oxides, Tellurium oxides

Section 11. Toxicological information

Acute toxicity:	GHS(Oral): Category 4; Harmful if swallowed. CdTe:mouse LD ₅₀ >15g/kg(RTECS(2009)) GHS(Dermal): Category 4; Harmful in contact with skin. GHS(Inhalation-dust,mist): Category 4 ; Harmful if inhaled.
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Skin corrosive / irritation:	GHS : No data available
Serious eye damage / irritation:	GHS : No data available
Respiratory sensitization:	GHS : No data available
Skin sensitization:	GHS : No data available
Germ cell mutagenicity:	GHS ; No data available
Carcinogenicity:	GHS : No data available

Chemical Name	ACGIH(2008)	IARC(2009)	NTP(2005)
Cadmium compounds	A2	1	A

ACGIH A2 Suspected human carcinogen.

IARC Groupe 1 The agent is carcinogenic to humans.

NTP A Known to be human carcinogens.

Reproductive toxicity:	GHS : No data available
Specific target organ toxicity — single exposure:	GHS ; No data available
Specific target organ toxicity — repeated exposure:	GHS : No data available
Aspiration hazard:	GHS ; No data available

Section 12. Ecological information

Ecotoxicity:

Hazards to the aquatic environment GHS: Category 1; Very toxic to aquatic life.

– acute toxicity:

Hazards to the aquatic environment GHS : Category 1

– chronic toxicity: ; Very toxic to aquatic life with long lasting effects.

Fish toxicity: No data available

Degradability: No data available

Bioaccumulative potential: No data available

Ozone layer: No Freon or Halon

Section 13. Disposal considerations

Disposal method: User of the product should contract with the local government or licensed 'Industrial Waste Haulers' for disposal of waste.

Section 14. Transport information

UN number: 2570

IATA shipping name: Cadmium compound

IATA classification: Hazardous Class 6.1

Toxic substances

IATA packing group:

HS code: 2842.90

Marine pollution: None

Section 15. Regulatory information

TSCA inventory : listed

Please refer to any other local / national measures that may be relevant.

Section 16. Other information

The information described above is believed to be correct. However, Kojundo Chemical Lab. makes no representation, warranty nor guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.