

XI'AN FUNCTION MATERIAL GROUP CO., LTD

Material Safety Data Sheet Indium Tellurium Alloy

1. Product and Company Identification

Trade Name: Indium tellurium alloy

Chemical Formula: In-Te

Recommended Use: Scientific research and development

Manufacturer/Supplier: XI'AN FUNCTION MATERIAL GROUP CO., LTD

Street: No. 69, Gazelle Valley, High-Tech Zone

City: XI'AN
State: Shaanxi
Zip Code: 710077
Country: China

Tel #: +86-29-88993870/+86-13519132051

2. Hazards Identification

Signal Word: Warning





Hazard Statements: H228 Flammable powder

H319 Toxic if inhaled H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause respiratory irritation

Precautionary Statements: P210 Keep away from heat/sparks. No smoking.

P261 Avoid breathing dust/fume/vapor

P301+P310 If swallowed: Immediately call a poison center/doctor P305+P351 If in eyes: Rinse cautiously with water for several minutes.

HMIS Health Ratings (0-4):

Health:

Flammability: 0 (2 powder)

Physical:

3. Composition

Chemical Family: Semi-metal alloy

Additional Names: NA

Indium (In):

Percentage: 0-100 wt% CAS #: 7440-74-6 EC #: 231-180-0

Tellurium (Te):

Percentage: 0-100 wt% CAS #: 13494-80-9 EC #: 236-813-4

4. First Aid Procedures

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None Important Symptoms: None

Remove victim to fresh air. Supply oxygen if breathing is difficult. Inhalation: Ingestion:

Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.

Wash affected area with mild soap and water. Remove any

contaminated clothing.

Flush eyes with water, blinking often for several minutes. Remove Eyes:

contact lenses if present and easy to do. Continue rinsing

5. Fire and Explosion Hazards Data

Flammability: Non-flammable, except as powder

Flash Point: N/A Autoignition Temperature: N/A

Extinguishing Media:

Skin:

Do not use water for metal fires – use CO₂, sand, extinguishing powder. Spec. Fire Fighting Procedure:

Use full-face, self-contained breathing apparatus with full protective

clothing to prevent contact with skin and eyes.

6. Accidental Release Measures

Wear appropriate respiratory and protective equipment specified in If Material Is Released/Spilled:

> special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal.

Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

7. Handling and Storage

Handling Conditions: Wash thoroughly after handling.

Storage Conditions: Store in a cool dry place in a tightly sealed container.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before

eating and smoking. Do not blow dust off clothing or skin with

compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below

threshold limit.

8. Exposure Controls and Personal Protection

Permissible Exposure Limits: 0.1 mg/m³ as Te, long-term value

Threshold Limit Value: 0.1 mg/m³ as In or Te, long-term value

Special Equipment: None

Respiratory Protection: Dust Respirator, NIOSH approved

Protective Gloves: Rubber gloves

Eve Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long

sleeves/pants.

9. Physical and Chemical Characteristics

Color Metallic grey – light to dark

Form: Powder, Granules, Pellets, Sputtering target, Custom parts

Odor: Odorless
Water Solubility: Insoluble
Boiling Point: N/A

Melting Point: $156.6 \,^{\circ}\text{C}$ (as indium) $-450 \,^{\circ}\text{C}$ (as tellurium)

Density: 6-7 g/cc Molecular weight: NA

10. Reactivity

Stability: Stable under recommended storage conditions

Reacts With: Acids, Bases, Halogens, Interhalogens, Oxidizing agents, Some metals

Incompatible Conditions: None

Hazardous Decomposition Products: Metal oxide fume

11. Toxicological Information

Potential Health Effects:

Eyes: Causes serious irritation
Skin: May cause irritation

Ingestion: Toxic

Inhalation: May cause irritation

Chronic: N/A

Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A

 $\begin{array}{ll} \mbox{Median Lethal Dose:} & 83 \mbox{ mg/kg as Te for rat by mouth} \\ \mbox{Median Lethal Concentration (4 hr):} & >2420 \mbox{ mg/m}^3 \mbox{ as Te for rat by inhalation} \end{array}$

Carcinogen: N/A

12. Ecological Information

Ecological data is not available.

13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

14. Transportation Data

Hazardous: Hazardous as powder only.



Hazard Class: 4.1 Flammable solids and desensitized explosives

Secondary: 6.1 Toxic substances

Packing Group: III UN Number: UN3089

Proper Shipping Name: Metal powders, flammable, toxic, n.o.s. (Indium tellurium)

	15. Regulatory Information	
Sec 302 Extremely Hazardous:	No	
Sec 304 Reportable Quantities:	N/A	
Sec 313 Toxic Chemicals:	No	
	16. Other Information	

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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