

Material Safety Data Sheet

Indium Antimony Tellurium

1. Product and Company Identification

Trade Name: Indium antimony tellurium

Chemical Formula: InSbTe

Recommended Use: Scientific research and development

Supplier: AJA International Inc

809 Country Way

Scituate MA 02066

24-Hour Emergency Contact: 800-424-9300 (US & Canada)

+1-703-527-3887 (International)

2. Hazards Identification

Signal Word: Danger

Hazard Statements: H301: Toxic if swallowed

H332: Harmful if inhaled

Precautionary Statements: P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER

or doctor/physician

P312: Call a POISON CENTER or doctor/physician if you feel unwell

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest

in a position comfortable for breathing

P405: Store locked up

P501: Dispose of contents/container in accordance with
local/regional/national/international regulations

HMIS Health Ratings (0-4):

Health: 1

Flammability: 0

Physical: 0

3. Composition

Chemical Family: Ceramic

Additional Names: None

Indium (In):

Percentage: 0-100 wt%

CAS #: 7440-74-6

EC #: 231-180-0

Antimony (Sb):

Percentage: 0-100 wt%

CAS #: 7440-36-0

EC #: 231-146-5

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

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

Ingestion: Seek Medical Attention.

Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

5. Firefighting Measures

Flammability: Non-flammable, except as powder

Extinguishing Media: 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. See section 10 for decomposition products.

6. Accidental Release Measures

If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in 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. Store apart from materials and conditions listed in section 10.

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 Te, long-term value

Special Equipment: None

Respiratory Protection: Dust Respirator

Protective Gloves: Rubber gloves

Eye Protection: Safety glasses or goggles

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

9. Physical and Chemical Characteristics

Color Silver

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

Odor: Odorless

Water Solubility: Insoluble

Boiling Point: N/A

Melting Point: N/A

Flash Point: N/A

Autoignition Temperature: N/A

Density: N/A

Molecular weight: N/A

10. Reactivity

Stability: Stable under recommended storage conditions

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

Incompatible Conditions: None

Hazardous Decomposition Products: Metal oxide fume, Indium oxide, Antimony oxides, Hydrogen telluride

11. Toxicological Information

Potential Health Effects:

Eyes: May cause irritation

Skin: May cause irritation

Ingestion: May cause irritation

Inhalation: May cause irritation

Chronic: N/A

Signs & Symptoms: N/A

Aggravated Medical Conditions: N/A

Median Lethal Dose: 83 mg/kg for rat by mouth

Carcinogen: N/A

12. Ecological Information

Aquatic Toxicity: Moderate

Persistent Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: Do not allow product to reach any water sources.

Danger to drinking water if even extremely small quantities leak into the ground.

13. Disposal Considerations

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

14. Transportation Data

Hazardous: Not hazardous for transportation.

Hazard Class: N/A

Packing Group: N/A

UN Number: N/A

Proper Shipping Name: N/A

15. Regulatory Information

Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A

Sec 313 Toxic Chemicals: Yes

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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