Section 1: Product Identification

Trade Name: Indium Antimonide
Chemical Nature: III-V Compound
Formula: InSb

OSHA PEL: Set 0.5 mg/m³ (Sb), 0.1mg/m³ (In)
ACGIH TLV: 0.5 mg/m³ (Sb), 0.5mg/m³ (In)
EPA EPCRA: *302 TPQ: N/A, *304 RQ: N/A *313 Report: N/A

Section 2: Hazards Identification

Signal Word: Warning

Hazard Statements: H302+H332: Harmful if swallowed or if inhaled
Precautionary Statements:
P261 Avoid breathing dust/fume/vapor
P264: Wash thoroughly after handling
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):
Health: 2
Flammability: 0
Physical: 1

Section 3: Composition/Ingredients

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>CAS#</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indium Antimonide</td>
<td>1312-41-0</td>
<td>100</td>
</tr>
</tbody>
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Section 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: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.
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
Section 5: Firefighting Measures

Flammability: Non-flammable
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

Section 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.

Section 7: Handling and Storage

Handling: Precautions for safe handling, keep container tightly sealed. Wash thoroughly after handling
Storage: Store in cool, dry place in tightly closed container. r. 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.

Section 8: Exposure Controls and Personal Protection

Permissible Exposure Limits: 0.1 mg/m3 as Sb, long-term value
Threshold Limit Value: 0.1 mg/m3 as InSb, 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.

Section 9: Physical/Chemical Characteristics

Boiling Point: N/A
Vapor Pressure (mm Hg): N/A
% Volatile by Volume: N/A
Solubility in Water: Insoluble
Specific Gravity (H2O=1): 5.75 (solid); 6.48 (liquid)
Vapor Density (Air = 1): N/A
Evaporation Rate (Butyl Acetate=1): N/A
Melting Point: 535 deg C
Appearance and Odor: Silvery metal-like appearance with no odor

Section 10: Reactivity Data

Stability: Stable
Incompatibility (Conditions to Avoid): N/A
Conditions to Avoid: N/A
Hazardous Decomposition Products: N/A
Section 11: Toxicological Information

Acute Effects: None known. May cause effects similar to those of acute inhalation

Skin Contact: May cause irritation.  
Eye Contact: May cause irritation

Inhalation: May cause irritation. Dust or fumes may cause antimony nausea, vomiting, bloody diarrhea, dizziness, irritability, and muscle pains. May cause liver damage.

Routes of Entry (Under Normal Conditions of Use): Ingestion – Yes

Medical Conditions Generally Aggravated by Exposure: None known.

Health Hazards (Acute and Chronic): None known

Carcinogenicity: None

Chronic Effects:

Ingestion: None known  
Skin Contact: May cause dermatitis

Eye Contact: None known

Inhalation: in humans exposed to antimony oxide fumes complaints referable to the nervous system have been reported.

Other: Animals exposed to antimony oxide fumes have developed problems in nerve system.

Signs and Symptoms of Overexposure:

Inhalation: Overexposure to dust or fumes may cause antimony nausea, vomiting, bloody diarrhea, dizziness, irritability, and muscle pains

Eye Contact: May cause irritation, itching

Skin Contact: No adverse effects anticipated.

Ingestion: No adverse effects anticipated since material is insoluble and nontoxic.

Emergency and First Aid Procedures: Treat symptomatically

Eyes: Flush eyes with lukewarm water for 15 minutes. Seek medical attention.

Section 12: Ecological Information

Aquatic Toxicity: Low

Persistent Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: toxic for aquatic organism

May cause long lasting harmful effect on aquatic life. Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach any water sources. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Do not allow undiluted product or large quantities to reach ground water, water course or sewage system. Avoid transfer into the environment.

Section 13: Disposal Considerations

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

Section 14: Transportation Data

Not hazardous for transportation

Hazard Class: 6.1 Toxic substances
Section 15: Regulatory Information

Sec 302 Extremely Hazardous: No
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: Yes

Section 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.