


ELECTRONIC SPACE PRODUCTS INTERNATIONAL

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MATERIAL SAFETY DATA SHEET
I PRODUCT IDENTIFICATION
Trade Name: Indium Antimonide

CAS #: 1312-41-0

II HAZARDOUS INGREDIENTS

<u>Component:</u>	<u>Percent:</u>	<u>OSHA/PEL:</u>	<u>ACGIH/TLV:</u>
Indium Antimonide	100	0.5 mg Sb/m ³ 0.1 mg In/m ³	0.5 mg Sb/m ³ 0.5 mg In/m ³

III PHYSICAL DATA

Boiling Point 760 mm Hg:	No data	Freezing/Melting Point:	535 °C
Specific Gravity (H₂O=1):	5.75 (solid); 6.48 (liquid)	Evaporation Rate:	N/A
% Volatile by Volume:	N/A	Vapor Pressure:	N/A
Reaction with H₂O:	None	Solubility in H₂O:	Insoluble
Appearance and Odor:	Silvery metal-like pieces or powder; odor not known.		

IV FIRE AND EXPLOSION HAZARDS DATA
Flash Point (Method used): N/A

Special Fire Fighting Procedures: Indium antimonide will melt and fume in air at 500 °C. Antimony trioxide will be liberated. Use normal firefighting procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing: hats, boots and gloves. If without risk remove material from fire area.

Extinguishing Media: Non-flammable. If involved in a fire, use dry chemical extinguishing agents, dry sand, or dry ground dolomite.

Unusual Fire and Explosion Hazards: N/A

V HEALTH HAZARD INFORMATION

Acute Effects:

Ingestion: 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.

Medical Conditions Aggravates by Chemical: None known.

Other Health Hazards: None known.

Most Likely Route of Entry: Ingestion.

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

Effects of Over Exposure:

Inhalation: Overexposure to fused silica dust or condensed silica vapors for an extended period of time may produce lung injury. Symptoms include coughing, wheezing and difficulty in breathing.

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

Skin Contact: No adverse effects anticipated.

Eye Contact: Irritation due to mechanical abrasion.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: Flush eyes with water to remove particles.

IV REACTIVITY DATA

Stability: Stable

Incompatibility (Material to Avoid): N/A

Hazardous Polymerization: Will not occur

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Use normal clean-up procedures, using a broom or vacuum, taking care to avoid excessive dusting.

Waste Disposal Method: Dispose of in accordance with Local, State and Federal Waste Disposal Regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: If exposure may exceed permissible limits, use a NIOSH-approved respirator for dust having a TLV not less than 0.05 mg/m³. Always observe respirator limitations.

Ventilation Requirements: For cutting or grinding operations, use local exhaust ventilation if necessary, to keep exposure levels below permissible limits.

IX SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Normal precautions for handling potentially sharp, broken edged material.

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ESPI shall not be held liable for any damage resulting from handling or from contact with the above product.

Prepared by: S. Dierks
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