



# Super Conductor Materials, Inc.

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Chemtrec: (800) 424-9300

Poison Center: (800) 562-8236

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## SAFETY DATA SHEET

Identity: Antimony

Formula: Sb

### SECTION I - GENERAL INFORMATION

Manufacturer: Super Conductor Materials, Inc.

The information below is believed to be accurate and represents the best information available to Super Conductor Materials, Inc. However, SCM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Molecular weight: 121.75

CAS #	OSHA PEL	ACGIH TLV	%
7440-36-0	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>	0.0 -100.0 %

### SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 1587.00°C

Vapor Pressure (vs. air or mmHg): 1mm at 886°C

Melting Point: 630.7°C

Density: 6.68 g/cm<sup>3</sup> at 25.0°C

Evaporation Rate: N/A

Flash Point: N/A

Solubility in water: Insoluble

*Appearance and odor:* Silver-white, lustrous, hard, brittle metal; no odor.

### SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

*Method Used:* Unknown

*Explosive Limits:* LEL: N/A

UEL: N/A

*Extinguishing Media:* Use suitable extinguishing agent for surrounding material and type of fire

*Special Fire Fighting Procedures:*

Firefighters must wear full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.



*Unusual Fire and Explosion Hazards:*

- When heated to decomposition or on contact with acid, antimony metal may emit toxic fumes of SbH<sub>3</sub> (stabine).
- Reacts with nascent hydrogen to form stabine.
- May react violently with NH<sub>4</sub>NO<sub>3</sub>, halogens, BrN<sub>3</sub>, BrF<sub>3</sub>, HClO<sub>3</sub>, ClO, ClF<sub>3</sub>, HNO<sub>3</sub>, KNO<sub>3</sub>, KmnO<sub>4</sub>, K<sub>2</sub>O<sub>2</sub>, NaNO<sub>3</sub> and oxidants.

**SECTION V - REACTIVITY DATA**

*Stability:* Stable

*Conditions to Avoid (instability):* None

*Incompatibility:* Oxidizers, acids, nascent hydrogen, halogenated acids or reducing agents.

*Hazardous Decomposition or Byproducts:* Stabine.

*Hazardous Polymerization:* Will not occur.

*Conditions to avoid (hazardous polymerization):* None.

**SECTION VI - HEALTH HAZARD DATA**

*Routes of entry:* Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other? No

Most antimony compounds are poisons by ingestion, inhalation, and intraperitoneal routes. Locally antimony compounds irritate the skin and mucous membranes. (Sax, Dangerous Properties of Industrial Materials, eighth edition)

*Signs and Symptoms of Overexposure:*

*Inhalation:* May cause a red, dry, throat, coughing, dizziness, headache, nausea, vomiting, diarrhea, cramps, insomnia and anorexia.

*Ingestion:* May cause headache, nausea, vomiting, diarrhea and cramps.

*Skin:* May cause red, itching and burning.

*Eye:* May cause red, itching, inflammation, burning and watering.

*Health Hazards (Acute and Chronic):*

*Inhalation:*

Acute: Inhalation of dust or powder may cause irritation to the nose, throat, mouth and nasal septal ulceration.

Chronic: May cause pneumonitis, liver and kidney abnormalities.

*Ingestion:*

Acute: May cause irritation to the lining of the stomach and intestines.

Chronic: No chronic health effects recorded.

*Skin:*

Acute: May cause irritation.

Chronic: May cause dermatitis and keratitis.



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*Eye:*

Acute: May cause severe irritation.

Chronic: May cause conjunctivitis.

*Target Organs:* May affect the respiratory system, kidneys and nervous system.

*Carcinogenicity:* NTP? No IARC Monographs? No OSHA Regulated? No

*Medical Conditions Aggravated by Exposure:* Pre-existing respiratory, gastric and skin disorders.

### Emergency and First Aid Procedures:

*Inhalation:* Remove victim to fresh air, keep warm and quiet, and give oxygen if breathing is difficult; seek medical attention

*Ingestion:* Give 1-2 glasses of milk or water and induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth to an unconscious person

*Skin:* Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

*Eye:* Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention

## SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

### *Steps to be taken in case material is released or spilled:*

Wear appropriate respiratory and protective equipment specified in section VIII. Isolate spill area, provide ventilation and extinguish sources of ignition. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for proper disposal. Take care not to raise dust.

### *Waste disposal method:*

Dispose of in accordance with state, local, and federal regulations.

### *Hazard Label Information:*

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

## SECTION VIII - CONTROL MEASURES

### *Protective Equipment Summary (Hazard Label Information):*

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent contact.

### *Ventilation:*

Local Exhaust: To maintain concentration at low exposure levels.

Mechanical (General): Recommended.

### *Work/Hygienic/Maintenance Practices:*

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established