

## **Material Safety Data Sheet**

Identity: Antimony oxide

Formula: Sb2O3

### SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM 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: 291.50

CAS #	OSHA PEL	ACGIH TLV	%
1309-64-4	0.5mg/m <sup>3</sup>	0.5mg/m <sup>3</sup>	0.0-100

### SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: Solid

Boiling Point: 1425.00 °C (2597.0 °F)

Vapor Pressure(vs. air or mmHg): 1 @ 574.0 °C

Melting Point: 656.00 °C (1212.8 °F)

Density: 5.67 g/cm<sup>3</sup>

Evaporation Rate: N/D

Flash Point: N/A

Solubility in water: Insoluble

*Appearance and odor:* White crystalline powder and pieces; no odor

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

*Method Used:* N/A

*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, antimony oxide may emit toxic fumes of antimony.

SECTION V - REACTIVITY DATA

*Stability:* Stable

*Conditions to Avoid (stability):* No data available

*Incompatibility:* Acids, basis, reducing agents, BrF<sub>3</sub> and chlorinated rubber, heat, interhalogens, chlorine trifluoride, bromine pentafluoride, phosphorous pentachloride.

*Hazardous Decomposition or Byproducts:* Fumes of antimony.

*Hazardous Polymerization:* Will not occur

*Conditions to avoid (hazardous polymerization):* No data available

SECTION VI - HEALTH HAZARD DATA

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

*Signs and Symptoms of Exposure:*

*Inhalation:* May cause a red, dry, throat, coughing dizziness, headache, chest pain, shortness of breath, weight loss, nausea, vomiting, diarrhea, cramps, insomnia, and anorexia.

*Ingestion:* May cause salivation, cough, metallic taste, vomiting, bloody diarrhea, dizziness, muscular pain, sleeplessness, and irritability.

*Skin:* May cause redness, itching and burning sensation.

*Eye:* May cause red, itching, inflammation, burning sensation.

*Health Hazards (Acute and Chronic):*

*Inhalation:*

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

Chronic: May cause pneumonitis, pneumoconiosis, heart disorders, possible lung cancer.

*Ingestion:*

Acute: POISON. May cause salivation, cough, metallic taste, vomiting, bloody diarrhea, dizziness, irritability, and muscular pain.

Chronic: May cause a dry throat, nausea, headache, sleeplessness, dizziness, loss of appetite.

*Skin:*

Acute: Poison by subcutaneous route. May cause irritation.

Chronic: May cause dermatitis.

*Eye:*

Acute: May cause irritation.

Chronic: No chronic health effects recorded.

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

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

*Medical Conditions Aggravated by Exposure:* Pre-existing respiratory disorder.

*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