STANFORD ADVANCED MATERIALS

http://www.samaterials.com

Stanford Advanced Materials
We not only sell products, we provide satisfactions.
72 Fairbanks Suite 100, Irvine, CA 92618, USA
Tel: (949) 407-8904 Fax: (949) 812-6690

Current Version: 2.0
Revision Date: Sep 5, 2012

Material Safety Data Sheet

Identity: Lead selenide Formula: PbSe

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: 286.15

CAS #	OSHA PEL	ACGIH TLV	%
12069-00-0	N/A	N/A	0-99.9

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical States: solid
Boiling Point: N/A
Melting Point: N/A
Evaporation Rate: N/A

Vapor Pressure (vs. air or mmHg): N/A
Solubility in water: N/A
Density: 8.1 g/cm^3
Flash Point: N/A

Appearance and odor: grey to black powder and pieces

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

Method Used: N/A *Explosive Limits*: LEL: N/A UEL: N/A

Extinguishing Media:

Use carbon dioxide, dry chemical powder or appropriate foam

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: N/A

SECTION V - REACTIVITY DATA

Stability: Stable *Conditions to Avoid (stability)*: N/A *Incompatibility:* Strong oxidizing agents

Hazardous Decomposition or Byproducts: Lead, lead oxides, selenium oxides
Hazardous Polymerization: will not occur

Stanford Advanced Materials
We not only sell products, we provide satisfactions.
72 Fairbanks Suite 100, Irvine, CA 92618, USA
Tel: (949) 407-8904 Fax: (949) 812-6690

Conditions to avoid (hazardous polymerization): N/A

SECTION VI - HEALTH HAZARD DATA

Health Hazards (Acute and Chronic):

Excessive exposure can affect blood, nervous and digestive systems. The synthesis of hemoglobin in inhibited and results in anemia. If left untreated, neuromuscular dysfunction, possible paralysis, and encephalopathy can result.

Additional symptoms of overexposure include joint and muscle pain, weakness of the extensor muscles, headaches, dizziness, abdominal pain, diarrhea, constipation, nausea, vomiting, blue line on the gums, insomnia, and metallic taste. High body levels produce increased cerebrospinal pressure, brain damage, and stupor leading to coma and often death. Acute selenium poisoning produces central nervous system effects, which include nervousness, convulsions, and drowsiness.

Other sings of intoxication can include skin eruptions, lassitude, gastrointestinal distress, teeth that are discolored or decayed, odorous breath, and partial loss of hair, and nails. Chronic exposure by inhalation can produce symptoms that include pallor, coating of the tongue, anemia, irritation of the mucosa, lumbar pain, liver and spleen damage as well as any of the other previously mentioned symptoms.

Target Organs: Blood, kidneys, nerves and reproductive system
Carcinogenicity: NTP? N/A IARC Monographs? N/A OSHA Regulated? N/A

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, 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.

Stanford Advanced Materials
We not only sell products, we provide satisfactions.
72 Fairbanks Suite 100, Irvine, CA 92618, USA
Tel: (949) 407-8904 Fax: (949) 812-6690

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