

Material Safety Data Sheet

Identity: Lanthanum

Formula: La

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 we assume no liability resulting from its use.

SECTION II - PRODUCT INFORMATION/HAZARDOUS INGREDIENTS

Chemical Family: Rare earth element

CAS #7439-91-0

Hazardous Components	CAS #	OSHA PEL	ACGIH TLV	%
Lanthanum	7439-91-0	Not established	Not established	

SECTION III - PHYSICAL/ CHEMICAL CHARACTERISTICS

Boiling Point: 3469°C

Specific Gravity (water=1): 6.166 @ 25deg. C

Melting Point: 920°C

Vapor Pressure: Essentially 0

Physical States: Solid

Vapor Density: NA

Evaporation Rate:0

Solubility in Water: Insoluble/reacts

% Volatile: 0

Appearance and Odor: Blue-gray to silver metal; odorless

SECTION IV - FIRE AND EXPLOSION DATA

Flash Point: NAExtinguishing Media: Flammable solid in all forms. Do not use water, carbon dioxide or halogenated extinguishers. Use dry chemical extinguishing agents, dry sand, or dry ground dolomite.Special Fire Fighting Procedures:

No special firefighting procedures needed, use normal 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.

Unusual Fire and Explosion Hazards:

Lanthanum powder is spontaneously flammable in air. When heated, all forms of the metal will react with water to produce flammable/explosive hydrogen gas. Powders and thin foils will react with water at room temperature.

SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Incompatibles

Incompatibility - Reacts vigorously with oxidizing agents. Violent reaction with nitric acid, phosphorus (above 400degrees), air and halogens. Incompatible with water, strong acids, carbon, nitrogen, boron, selenium, silicon and sulfur. Lanthanum powder is spontaneously flammable in air. When heated, all forms of the metal will react with water to produce flammable/explosive hydrogen gas. Powders and thin foils will react with water at room temperature.

Hazardous Decomposition or byproducts: Explosive hydrogen gas.

Hazardous Polymerization: Will not occur.

SECTION VI - HEALTH HAZARD DATA

Routes of entry: Inhalation: Yes Skin - Yes Eyes - Yes Ingestion - Yes

Effects of Exposure

Acute Effects

Ingestion: Ingestion may cause nausea and vomiting. Evidence suggest low toxicity due to poor absorption by the oral route.

Skin Contact: May cause irritation.

Eye Contact: May cause irritation. Irritation may be severe.

Inhalation: May cause irritation.

Medical Conditions, if any, Aggravated by the Chemical: None known.

Other Health Hazards: Lanthanum and other rare earths may cause delayed blood clotting leading to hemorrhages when given intravenously.

Most Likely Routes of Entry: Ingestion

Chronic Effects

Ingestion: None known.

Skin Contact: None known.

Eye Contact: None known.

Inhalation: None known.

Other: Lanthanum has caused liver damage in laboratory animals.

Carcinogenicity: NTP: No IARC: No OSHA: No EPA: No

Emergency And First Aid Procedures:

Inhalation: No specific information available, one should obtain medical attention.

Ingestion: No data available but one should obtain medical attention.

Skin: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

Eye: Immediately flush eyes, including under eyelids, with large amounts of water for at least 15 minutes. Call a physician.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE.

Steps To Be Taken In Case Material Is Released or Spilled:

Wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

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

Hazard Label Information:

Store and handle under a dry, inert atmosphere.

Other Precautions:

Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary - Hazard Label Information NIOSH

approved respirator Impervious gloves Safety glasses
Clothes to prevent skin contact

Respiratory Protection (Specify Type):

Ventilation: Glove bag or box with a dry, inert atmosphere.

Respiratory Protection: High efficiency particle respirator.

Protective Gloves: Rubber

Eye/Face Protection: ANSI approved safety goggles

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 and smoking. Do not blow dust off clothing or skin with compressed air.