



ELECTRONIC SPACE PRODUCTS INTERNATIONAL

1050 Benson Way, Ashland, OR 97520
 Toll Free (800) 638-2581 * Fax (541) 488-8313
 E-Mail: sales@espimetals.com

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name:	Lanthanum	Synonym:	Lanthanum Metal
Formula:	La	CAS#:	7439-91-0

II HAZARDOUS INGREDIENTS

Hazardous Components	%	OSHA/TWA (Total Dust)	OSHA/TWA (Respirable Fraction)
Lanthanum	0-100	15 mg/m ³	5 mg/m ³

HMIS Ratings (0-4): Health: 1 Flammability: 3 Reactivity: 2

SARA Title III Hazard Classification: Fire Hazard, Reactive Hazard.

Warning Statements: FLAMMABLE SOLID. REACTS WITH WATER AND DILUTE ACIDS TO PRODUCE FLAMMABLE, EXPLOSIVE HYDROGEN GAS. DUSTS IN HIGH CONCENTRATIONS MAY CAUSE SKIN, EYE AND RESPIRATORY TRACT IRRITATION.

III PHYSICAL DATA

Boiling Point at 760 mm Hg:	3457 °C	Melting Point:	921 °C
Vapor Density (air=1):	N/A	Vapor Pressure:	N/A
% Volatiles by Volume:	N/A	Solubility in H₂O:	Insoluble/reacts
Specific Gravity at 25 °C:	6.14	Appearance and Odor:	Silver solid, odorless.

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (Method used): N/A

Flammable Limits: LEL: N/A UEL: N/A

Extinguishing Media: Dry chemical, Class D extinguisher. DO NOT USE WATER.

Special Fire Fighting Procedures: Firefighters should wear a NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Unusual Fire & Explosion Hazard: Product will burn under fire conditions. May react with water liberating flammable, explosive hydrogen gas. Like all organic and most dry chemicals, as a powder or dust, this product (when mixed with air in critical proportions and in the presence of an ignition source) may present an explosion hazard.

V HEALTH HAZARD INFORMATION

Effects of Exposure: Acute:

Inhalation: Low acute inhalation toxicity. May cause upper respiratory tract irritation.

Ingestion: Low acute oral toxicity.

Skin: Skin absorption not likely. Essentially non-irritating.

Eye: Non-irritating. May cause foreign body irritation only.

Medical Conditions Possibly Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis.

Carcinogenicity: NTP: No IARC: No OSHA: No ACGIH: No

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if respiratory irritation or distress continues.

INGESTION: If victim is conscious and alert, give 1-2 glasses of water to drink (do not give anything by mouth to an unconscious person). Seek medical attention. Do not leave victim unattended.

SKIN: In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

EYES: Rinse particulate matter from eye. Seek medical attention if irritation develops or persists or if visual changes occur.

Note to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Dusting conditions, electric arcs, open flame, spark, and moisture.

Incompatibility (Material to Avoid): Air, strong acids, strong oxidizing agents, acid chlorides, halogens, chlorates, bromates, and iodates.

Hazardous Decomposition Products: Powders or thin foils will react with water at room temperature to produce flammable, explosive H₂ (hydrogen gas).

Hazardous Polymerization: Will not occur

VII SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear appropriate protective gear. Sweep up and place in an appropriate closed container. Vacuuming should be prohibited. Use non-sparking tools. Clean up residual material by washing area with water. Do not flush to drain.

Waste Disposal Method: In accordance with Local, State and Federal regulations.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): NIOSH/MSHA approved air-purifying (half-mask/full-face) respirator with cartridges or canister, approved for use against dusts, mists and fumes.

Ventilation: General area dilution/exhaust ventilation.

Eye Protection: Safety glasses with side shields. Chemical workers Dust-Proof Goggles (under dusting conditions)

Protective Clothing: Work clothing and gloves. Consideration must be given both to durability as well as permeation resistance.

IX SPECIAL PRECAUTIONS

Precautions to Be Taken in Handling and Storage: Store under inert gas. Store in a cool, dry place in tightly closed containers. Air and moisture sensitive. Store away from oxidizers and other materials listed under incompatibility. Use non-sparking tools and grounded/bonded equipment and containers when transferring. Avoid breathing dusts or vapors. Avoid direct or prolonged contact with skin and eyes. Wash hands thoroughly after handling. Do not rub eyes with soiled hands. Do not eat, drink, or smoke in the work area.

Other Precautions: Avoid creating dusts as this product, like most materials in powder form, is capable of creating a dust explosion.

Work Practice Controls: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. Wash exposed skin promptly to remove accidental splashes of contact with this material. Do not blow dust off clothing or skin with compressed air.

Regulatory Status: TSCA Inventory Status: Product is TSCA certified.

Transportation Status:

Powder and Thin Foil: Water reactive solid, n.o.s. (lanthanum metal), Flammable solid, n.o.s.; UN 3132. Packing Group II. Hazard Class 4.3. Emergency Guide # 138.

Ingot and Chunk: Flammable solid, Inorganic, n.o.s., (lanthanum metal) UN 3178. Packing Group II. Hazard Class 4.1.

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.

Issued by: S. Dierks
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