

# SAFETY DATA SHEET

Date Printed: 05/05/2024

Date Revised: 01/15/2022

## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Lanthanum Nanoparticles

**Product Code:** LA-M-05-NP

**CAS Number:** 7439-91-0

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Substances and mixtures, which in contact with water, emit flammable gases (Category 1), H260

For the full text of the H - Statements mentioned in this Section, see Section 16.

GHS Label elements, including precautionary statements

Pictogram



Signal word: Danger

Hazard statement(s)

H260

In contact with water releases flammable gases which may ignite spontaneously.

Precautionary statement(s)

P223

Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231 + P232

Handle under inert gas. Protect from moisture.

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P335 + P334

Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.

P370 + P378

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P402 + P404

Store in a dry place. Store in a closed container.

P501

Dispose of contents/ container to an approved waste disposal plan

Hazards not otherwise classified (HNOC) or not covered by GHS

Reacts violently with water.

---

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substances

Formula: La

Molecular Weight: 138.91 g/mol

CAS-No.: 7439-91-0

EC-No.: 231-099-0

No ingredients are hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

For the full text of the H - Statements mentioned in this Section, see Section 1

---

## **SECTION 4. FIRST AID MEASURES**

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed: no data available

---

## **SECTION 5. FIREFIGHTING MEASURES**

Extinguishing media

Suitable extinguishing media

Dry powder

Special hazards arising from the substance or mixture

Lanthanum oxides

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.  
Further information: no data available

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains

Methods and materials for containment and cleaning up

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Do not flush with water.

Keep in suitable, closed containers for disposal

Reference to other sections

For disposal see section 13

---

## **SECTION 7. HANDLING AND STORAGE**

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

For precautions see section 2.2

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage.

Air and moisture sensitive.

Keep in a dry place.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

---

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

Body Protection

Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drain

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Form: powder

Colour: gray

Odor: no data available

Odor Threshold: no data available

pH: no data available

Melting point/freezing point

Melting point/range: 920 °C (1,688 °F)-lit.

Initial boiling point and boiling range: 3,464 °C (6,267 °F)-lit.

Flash point: no data available

Evaporation rate: no data available

Flammability (solid, gas): no data available

Upper/lower flammability or explosive limits: no data available

Vapor pressure: no data available

Vapor density: no data available

Relative density: 6.19 g/mL at 25 °C (77 °F)

Water solubility: no data available

Partition coefficient: n-octanol/water: no data available

Auto-ignition temperature: no data available

Decomposition temperature: no data available

Viscosity: no data available

Explosive properties: no data available

Oxidizing properties: no data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts violently with water.

Conditions to avoid

Exposure to moisture.

Incompatible materials

Strong acids, Strong oxidizing agents, Halogens, Phosphorus, Sulphur compounds  
Hazardous decomposition products  
Other decomposition products-no data available  
In the event of fire: see section 5

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

Information on toxicological effects

Acute toxicity

no data available

Inhalation: no data available

Dermal:

no data available

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

---

## **SECTION 12. ECOLOGICAL INFORMATION**

Toxicity  
no data available  
Persistence and degradability:  
no data available  
Bioaccumulative potential:  
no data available  
Mobility in soil:  
no data available  
Results of PBT and vPvB assessment:  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted  
Other adverse effects  
no data available

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste treatment methods  
Product  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable.  
Offer surplus and non-recyclable solutions to a licensed disposal company.  
Contact a licensed professional waste disposal service to dispose of this material.  
Contaminated packaging  
Dispose of as unused product

---

## **SECTION 14. TRANSPORT INFORMATION**

DOT (US)  
UN number: 3208  
Class: 4.3  
Packing group: I  
Proper shipping name: Metallic substance, water-reactive, n.o.s. (Lanthanum)  
Reportable Quantity (RQ):  
Marine pollutant: No  
Poison Inhalation Hazard: No  
IMDG  
UN number: 3208  
Class: 4.3  
Packing group: I  
EMS-No: F-G, S-N  
Proper shipping name:  
METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Lanthanum)  
Marine pollutant: No  
IATA  
UN number: 3208  
Class: 4.3  
Packing group: I  
Proper shipping name: Metallic substance, water-reactive, n.o.s. (Lanthanum)  
IATA Passenger: Not permitted for transport

---

## SECTION 15. REGULATORY INFORMATION

### SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

#### Reactivity Hazard

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

#### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

---

## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.