SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

- **Product name**: Lanthanum, powder, â’40 mesh, under oil, 99.9% trace rare earth metals basis
- **Product Number**: 263109
- **Brand**: Aldrich
- **REACH No.**: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
- **CAS-No.**: 7439-91-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

- **Identified uses**: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

- **Company**: Sigma-Aldrich Inc.
  3050 SPRUCE ST
  ST. LOUIS MO  63103
  UNITED STATES
- **Telephone**: +1 314 771-5765
- **Fax**: +1 800 325-5052

1.4 Emergency telephone

- **Emergency Phone #**: 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Substances 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.

2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**

Pictogram

The life science business of Merck operates as MilliporeSigma in the US and Canada
The life science business of Merck operates as MilliporeSigma in the US and Canada.

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.
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P422: Store contents under inert gas.

Supplemental Hazard information (EU)
EUH014: Reacts violently with water.

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances
Formula: La
Molecular weight: 138.91 g/mol
CAS-No.: 7439-91-0
EC-No.: 231-099-0

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 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

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

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.

4.2 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.
4.3 Indication of any immediate medical attention and special treatment needed
No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media
   Suitable extinguishing media
   Dry powder

5.2 Special hazards arising from the substance or mixture
   Lanthanum oxides

5.3 Advice for firefighters
   Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information
   No data available

SECTION 6: Accidental release measures

6.1 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.

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

6.3 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.

6.4 Reference to other sections
   For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
   Advice on protection against fire and explosion
   Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.

   Hygiene measures
   Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
   For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
   Storage conditions
   Store in cool place. 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.
**Storage class**
Storage class (TRGS 510): 4.3: Hazardous materials, which set free flammable gases upon contact with water

**7.3 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**

**8.1 Control parameters**
**Ingredients with workplace control parameters**

**8.2 Exposure controls**
**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.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact
Material: Nitrile rubber
Minimum layer thickness: 0,11 mm
Break through time: 480 min
Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**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 drains.

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**SECTION 9: Physical and chemical properties**

9.1 **Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>a) Physical state</th>
<th>powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Color</td>
<td>gray</td>
</tr>
<tr>
<td>c) Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>d) Melting point/freezing point</td>
<td>Melting point/range: 920 °C - lit.</td>
</tr>
<tr>
<td>e) Initial boiling point and boiling range</td>
<td>3.464 °C - lit.</td>
</tr>
<tr>
<td>f) Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>g) Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>h) Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>i) Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>j) Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>k) pH</td>
<td>No data available</td>
</tr>
<tr>
<td>l) Viscosity</td>
<td>Viscosity, kinematic: No data available Viscosity, dynamic: No data available</td>
</tr>
<tr>
<td>m) Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>n) Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>o) Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>p) Density</td>
<td>6.19 g/mL at 25 °C - lit. Relative density</td>
</tr>
<tr>
<td>q) Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>r) Particle characteristics</td>
<td>No data available</td>
</tr>
</tbody>
</table>
s) Explosive properties No data available
t) Oxidizing properties No data available

9.2 **Other safety information**
No data available

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**SECTION 10: Stability and reactivity**

10.1 **Reactivity**
No data available

10.2 **Chemical stability**
Stable under recommended storage conditions.

10.3 **Possibility of hazardous reactions**
Reacts violently with water.

10.4 **Conditions to avoid**
Exposure to moisture.

10.5 **Incompatible materials**
Strong acids, Strong oxidizing agents, Halogens, Phosphorus, Sulfur compounds

10.6 **Hazardous decomposition products**
In the event of fire: see section 5

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**SECTION 11: Toxicological information**

11.1 **Information on toxicological effects**

- **Acute toxicity**
  Oral: No data available
  Inhalation: No data available
  Dermal: No data available

- **Skin corrosion/irritation**
  Remarks: No data available

- **Serious eye damage/eye irritation**
  Remarks: No data available

- **Respiratory or skin sensitization**
  No data available

- **Germ cell mutagenicity**
  No data available

- **Carcinogenicity**
  No data available

- **Reproductive toxicity**
  No data available

- **Specific target organ toxicity - single exposure**
  No data available

- **Specific target organ toxicity - repeated exposure**
  No data available
11.2 **Additional Information**
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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**SECTION 12: Ecological information**

12.1 **Toxicity**
No data available

**Toxicity to fish**: LC50 - *Oncorhynchus mykiss* (rainbow trout) - 0.02 mg/l - 28 d (Chronic toxicity)

12.2 **Persistence and degradability**
No data available

12.3 **Bioaccumulative potential**
No data available

12.4 **Mobility in soil**
No data available

12.5 **Results of PBT and vPvB assessment**
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 **Endocrine disrupting properties**
No data available

12.7 **Other adverse effects**
No data available

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**SECTION 13: Disposal considerations**

13.1 **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.

**Contaminated packaging**
Dispose of as unused product.

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**SECTION 14: Transport information**

14.1 **UN number**

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3208</td>
<td>3208</td>
<td>3208</td>
</tr>
</tbody>
</table>

14.2 **UN proper shipping name**

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Lanthanum)</td>
<td>METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Lanthanum)</td>
<td>Metallic substance, water-reactive, n.o.s. (Lanthanum)</td>
</tr>
</tbody>
</table>

The life science business of Merck operates as MilliporeSigma in the US and Canada.
Passenger Aircraft: Not permitted for transport

14.3 Transport hazard class(es)
   ADR/RID: 4.3
   IMDG: 4.3
   IATA: 4.3

14.4 Packaging group
   ADR/RID: I
   IMDG: I
   IATA: I

14.5 Environmental hazards
   ADR/RID: no
   IMDG Marine pollutant: no
   IATA: no

14.6 Special precautions for user
   No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
   This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.
   National legislation

15.2 Chemical Safety Assessment
   For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.
   EUH014 Reacts violently with water.
   H260 In contact with water releases flammable gases which may ignite spontaneously.
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