

# SAFETY DATA SHEET

Version 8.5  
Revision Date 2025/05/13  
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Date of first issue 2021/11/23  
SDS No. Eternal-Element - ET-La-202501  
Product Number Eternal-Element - ET-La-202501

## Lanthanum(III) oxide

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### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifiers

Product name : Lanthanum(III) oxide  
Product Number : ET-La-202501  
Brand : Eternal-Element  
CAS-No. : 1312-81-8

#### 1.2 Details of the supplier of the safety data sheet

Company : Shanghai Sheeny Metal Mateirals Co.,Ltd.  
Room 210, Kedi Building,  
No. 688 Huajiang Road, Jiading District,  
SHANGHAI  
201800 SHANGHAI CHINA  
上海斯年金属材料有限公司  
上海市嘉定区华江公路688号凯迪大厦210室  
邮政编码：201800

Telephone : +86 16602150044  
Fax : +86 16602150044

#### 1.3 Emergency telephone

Emergency Phone # : +86 4006632276

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#### 1.4 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : For R&D use only. Not for pharmaceutical, household or other uses.

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## 2. HAZARDS IDENTIFICATION

### Emergency Overview

<b>Appearance</b>	: powder
<b>Color</b>	: white
<b>Odor</b>	: odourless

Not a hazardous substance or mixture.

### GHS Classification

Not a hazardous substance or mixture.

### GHS label elements

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

### Physical and chemical hazards

Not classified based on available information.

### Health hazards

Not classified based on available information.

### Environmental hazards

Not classified based on available information.

### Other hazards which do not result in classification

None known.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

### Components

Chemical name	CAS-No.	Concentration (% w/w)
lanthanum oxide	1312-81-8	<= 100

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## 4. FIRST AID MEASURES

General advice : Show this safety data sheet to the doctor in attendance.

If inhaled : After inhalation: fresh air.

In case of skin contact : In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

	Consult a physician.
In case of eye contact	: After eye contact: rinse out with plenty of water. Remove contact lenses.
If swallowed	: After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.
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
Protection of first-aiders	: For personal protection see section 8.
Notes to physician	: No data available

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## 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: For this substance/mixture no limitations of extinguishing agents are given.
Specific hazards during fire fighting	: Not combustible.  Ambient fire may liberate hazardous vapours.
Hazardous combustion products	: Lanthanum oxides
Specific extinguishing methods	: Prevent fire extinguishing water from contaminating surface water or the ground water system.
Special protective equipment for fire-fighters	: Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.
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Ensure adequate ventilation.  
 Evacuate the danger area, observe emergency procedures, consult an expert.  
 Advice for emergency responders :  
 For personal protection see section 8.

Environmental precautions : Do not let product enter drains.

Methods and materials for containment and cleaning up : Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## 7. HANDLING AND STORAGE

### Handling

For precautions see section 2.2.

### Storage

Further information on storage conditions : Tightly closed. Dry.

Storage class : 13, Non Combustible Solids

Recommended storage temperature : Recommended storage temperature see product label.

Further information on storage stability : Store under inert gas. Air sensitive. hygroscopic

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
lanthanum oxide	1312-81-8	PC-TWA (Total dust)	2.5 mg/m <sup>3</sup>	GBZ 2.1-2007

**Engineering measures** : No data available

### Personal protective equipment

Respiratory protection : required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN\* EN

143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: : Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Eye/face protection : Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Safety glasses

Skin and body protection : protective clothing

Hand protection

Material	: Nitrile rubber
Break through time	: 480 min
Glove thickness	: 0.11 mm
Protective index	: Full contact
Manufacturer	: KCL 741 Dermatril® L

Material	: Nitrile rubber
Break through time	: 480 min
Glove thickness	: 0.11 mm
Protective index	: Splash contact
Manufacturer	: KCL 741 Dermatril® L

Remarks : This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Hygiene measures : Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Color : white

Odor	: odourless
Odor Threshold	: No data available
pH	: No data available
Melting point/ range	: 2,305 - 2,315 °C (ca. 1,013 hPa)
Boiling point/boiling range	: 4,200 °C (1,013 hPa)
Flash point	: Not applicable
Evaporation rate	: No data available
Flammability (solid, gas)	: The product is not flammable. Method : Flammability (solids) GLP: yes
Burning rate	: No data available
Self-ignition	: > 400 °C 1,013.25 hPa Method : Relative self-ignition temperature for solids GLP: yes does not ignite
Upper explosion limit / Upper flammability limit	: No data available
Lower explosion limit / Lower flammability limit	: No data available
Vapor pressure	: No data available
Relative vapour density	: No data available
Relative density	: No data available
Density	: 6.51 g/cm <sup>3</sup> (25 °C) Method : lit.
Solubility(ies)	
Water solubility	: 0.00007 g/l insoluble (20 °C) Method : OECD Test Guideline 105
Partition coefficient: n-octanol/water	: Not applicable for inorganic substances
Autoignition temperature	: not combustible

Decomposition temperature	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available
Explosive properties	: No data available
Oxidizing properties	: none
Molecular weight	: 325.81 g/mol
Particle characteristics	
Particle size	: No data available

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## 10. STABILITY AND REACTIVITY

Reactivity	: No data available
Chemical stability	: The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	: Violent reactions possible with: acids
Conditions to avoid	: Avoid moisture.  no information available
Incompatible materials	: No data available
Hazardous decomposition products	: In the event of fire: see section 5

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Oral : No data available

Inhalation : No data available

LD50 Dermal - Rabbit - > 1,087 mg/kg

Remarks: (ECHA)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

Remarks: (ECHA)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: Mild eye irritation  
(Draize Test)

**Respiratory or skin sensitization**

Maximisation Test - Guinea pig

Result: Does not cause skin sensitisation.  
(Regulation (EC) No. 440/2008, Annex, B.6)

**Germ cell mutagenicity**

Test Type : Ames test

Test system : S. typhimurium

Metabolic activation : with and without metabolic activation

Method : Regulation (EC) No. 440/2008, Annex, B.13/14 (Ames test)

Result: negative

**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

**Aspiration hazard**

No data available

**11.2 Additional Information**

RTECS : OE5330000

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

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Handle in accordance with good industrial hygiene and safety practice.

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**12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Ianthanum oxide:**

Toxicity to fish : Remarks: No data available

**Persistence and degradability****Components:****lanthanum oxide:**

Biodegradability : Remarks: The methods for determining the biological degradability are not applicable to inorganic substances.

**Bioaccumulative potential****Components:****lanthanum oxide:**

Partition coefficient: n-octanol/water : Remarks: Not applicable for inorganic substances

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues : Offer surplus and non-recyclable solutions to a licensed disposal company.

**14. TRANSPORT INFORMATION****International Regulations****IATA-DGR**

UN/ID No. : Not applicable  
Proper shipping name : Not applicable  
Class : Not applicable  
Subsidiary risk : Not applicable  
Packing group : Not applicable  
Labels : Not applicable  
Packing instruction (cargo aircraft) : Not applicable  
Packing instruction (passenger aircraft) : Not applicable

**IMDG-Code**

UN number : Not applicable  
Proper shipping name : Not applicable  
Class : Not applicable  
Subsidiary risk : Not applicable

Packing group	:	Not applicable
Labels	:	Not applicable
EmS Code	:	Not applicable
Marine pollutant	:	no

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****JT/T 617**

UN number	:	Not applicable
Proper shipping name	:	Not applicable
Class	:	Not applicable
Subsidiary risk	:	Not applicable
Packing group	:	Not applicable
Labels	:	Not applicable
Environmentally hazardous	:	no

**Special precautions for user**

Remarks	:	Not classified as dangerous in the meaning of transport regulations.
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**15. REGULATORY INFORMATION****National regulatory information****Law on the Prevention and Control of Occupational Diseases****Regulations on Safety Management of Hazardous Chemicals**

Catalogue of Hazardous Chemicals	:
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Hazardous Chemicals for Priority Management under SAWS	:	Not applicable
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**Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

China Severely Restricted Toxic Chemicals for Import and Export	:	Not applicable
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**16. OTHER INFORMATION**

Revision Date	:	2025/05/13
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**Further information**

Other information	:	The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical
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substance or mixture and is applicable to appropriate safety precautions for the product. It does not represent any guarantee of the properties of the product. Eternal-Element Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www. eternal-element.com](http://www. eternal-element.com) and/or the reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright Shanghai Sheeny Metal Mateirals Co.,Ltd. License granted to make unlimited paper copies for internal use only.

Date format : yyyy/mm/dd

#### **Full text of other abbreviations**

GBZ 2.1-2007 : Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

GBZ 2.1-2007 / PC-TWA : Permissible concentration - time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI -

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Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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