

# Lanthanum Oxide Nanoparticles (La<sub>2</sub>O<sub>3</sub>)

US Research Nanomaterials, Inc.

Material Safety Data Sheet

acc. to OSHA and ANSI

## 1 Identification of substance:

Product details:

Product name: Lanthanum oxide

Stock number: US1101M

Manufacturer/Supplier:

**US Research Nanomaterials, Inc.**

3302 Twig Leaf Lane

Houston, Texas 77084, USA

[www.us-nano.com](http://www.us-nano.com)

## 2 Composition/Data on components:

Chemical characterization:

Description: (CAS#)

Lanthanum oxide (CAS# 1312-81-8), 100%

Identification number(s):

EINECS Number: 215-200-5

## 3 Hazards identification

Hazard description: • Not applicable

Information pertaining to particular dangers for man and environment

Not applicable

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) =

1 Flammability = 0

Reactivity = 0

#### 4 First aid measures

After inhalation

Supply fresh air. If required, provide artificial respiration.

Keep patient warm.

Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek medical treatment.

#### 5 Fire fighting measures

Suitable extinguishing agents

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray.

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

#### 6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Pick up mechanically.

Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

Handling

Information for safe handling:

Keep container tightly sealed.  
Store in cool, dry place in tightly closed containers.  
No special precautions are necessary if used correctly.  
Information about protection against explosions and fires:

No special measures required.

#### Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

### 8 Exposure controls and personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals

and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Not required.

Additional information: No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Body protection: Protective work clothing.

### 9 Physical and chemical properties:

General Information

Form: Powder

Color: White

	Value/Range	Unit	Method
Odor: Odorless			
Change in condition			
Melting point/Melting range:	2307	° C	(dec)
Boiling point/Boiling range:	4200	° C	(dec)
Sublimation temperature / start:	Not determined		
Flash point:	Not applicable		
Flammability (solid, gaseous)	Product is not flammable.		
Ignition temperature:	Not determined		
Decomposition temperature:	Not determined		
Danger of explosion:			
Product does not present an explosion hazard.			
Explosion limits:			
Lower:	Not determined		
Upper:	Not determined		
Vapor pressure:	Not determined		
Density:	at 20 ° C	6.51 g/cm <sup>3</sup>	
Solubility in / Miscibility with			
Water:		Insoluble	

## 10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Acids

Oxidizing agents

Carbon dioxide

Dangerous reactions No dangerous reactions known Dangerous

products of decomposition: Metal oxide fume

## 11 Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification:

Oral: Not available

LD50: Not available

Primary irritant effect:

on the skin: Generally the product does not irritate the skin.

on the eye: Powder: irritant effect

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

14 Transport information

• DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

• **IATA**

**Non-Hazardous for Air Transport: Non-hazardous for air transport.**

**15 Regulations**

**Product related hazard informations:  
Observe the general safety regulations when handling chemicals**

**National regulations**

**All components of this product are listed in the U.S.  
Environmental Protection Agency Toxic Substances Control Act  
Chemical substance Inventory.**

**All components of this product are listed on the Canadian  
Domestic Substances List (DSL).**

**Information about limitation of use:**

**For use only by technically qualified individuals.**

**16 Other information:**

**Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.**