

Safety Data Sheet
Lanthanum Carbonate product

1. Identification

- **Product Name:** Lanthanum Carbonate
- **Manufacturer Information:**
 - Company Name:** Shanghai Nengpu Industrial Co.,Ltd.
 - Company Address:** 3128 Huyi Highway, 9th Floor, Jiading, Shanghai, China
 - Department:** Technical Division, Quality Assurance Department
 - Duty Officer:** Xianzhi Wu , Chunsheng Ma, Chong Guan
 - Zip Code:** 201801
 - TEL:** 086-021-31109051
 - Mobile:** 17717060951
 - Fax:** 086-021-59157533
 - Email Address:** tb3461@sina.com
 - Emergency Contact:** 13524019558

2. Hazard(s) identification

- **Classification of the substance or mixture**



Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Label elements**
- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard-determining components of labeling:**

Rare Earth Compound
- **Hazard statements:**

May cause an allergic skin reaction.
- **Precautionary statements:**

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves.
Contaminated work clothing must not be allowed out of the workplace.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.

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IF ON SKIN: Wash with plenty of water.
Specific treatment (see on this label).
Dispose of contents/container in accordance with
local/regional/national/international regulations.

▪ **Classification system:**

▪ **NFPA ratings (scale 0 - 4)**



▪ **HMIS-ratings (scale 0 - 4)**



3. Composition/information on ingredients

▪ **Name:** Lanthanum Carbonate

▪ **Chemical Composition**

Substance	percentage %	CAS No.
La ₂ O ₃	95-99	1312-81-8
CeO ₂	<2.0	1306-38-3
Fe ₂ O ₃	<0.1	1332-37-2
Na ₂ O	<0.2	1313-59-3

4. First-aid measures

▪ **Description of first aid measures**

▪ **General information:**

Immediately remove contaminated clothing if necessary to prevent direct skin contact.

▪ **After inhalation:** Supply fresh air; consult doctor in case of complaints.

▪ **After skin contact:**

Immediately flush skin with water for at least 15 minutes.

If skin irritation occur, consult a doctor.

▪ **After eye contact:**

Flush opened eye with large quantities of running water for at least 30 minutes. If symptoms occur, consult a doctor.

▪ **After swallowing:** Do not induce vomiting; immediately call for medical help.

▪ **Information for doctor:**

▪ **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

▪ **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5. Fire-fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Hazardous combustion products**
Carbon monoxide and carbon dioxide
Metal oxide fume
- **Protective equipment:**
Wear personal protective equipment.
Wear respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Vacuuming or wet sweeping may be used to avoid dust dispersal.
Clean the affected area carefully; suitable cleaners are:
Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.
Ensure adequate ventilation.
Dispose contaminated material as waste according to section 13.
- **Reference to other sections**
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:**
- **Precautions for safe handling**
Keep receptacles tightly sealed.
Avoid formation of respirable particles.
Prevent formation of dust.
- **Information about protection against explosions and fires:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original

receptacle.

▪ **Information about storage in one common storage facility:**

Store away from foodstuffs.

Do not store together with acids.

Store away from water.

▪ **Further information about storage conditions:**

This product is hygroscopic.

Protect from humidity and water.

Store in cool, dry conditions in well sealed receptacles.

Keep receptacle tightly sealed.

8. Exposure controls/personal protection

▪ **Additional information about design of technical systems:** No further data; see item 7.

▪ **Components with limit values that require monitoring at the workplace:** Not required.

▪ **Additional information:** Valid lists at time of creation were used as basis.

▪ **Exposure controls**

▪ **Personal protective equipment:**

▪ **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Prevent contact with the eyes and skin.

Do not inhale dust / smoke / mist.

▪ **Breathing equipment:**

In case of brief exposure use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air. As appropriate for the employee exposure, use a NIOSH approved respirator and cartridge.

▪ **Protection of hands:**

Avoid direct contact with the chemical/ the product/ the preparation by organizational measures.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Check protective gloves prior to each use for their proper condition.

Wear gloves for the protection against mechanical hazards.

Use gloves of stable material (e.g. Nitrile)

▪ **Material of gloves**

Recommended thickness of the material: ≥ 0.35 mm

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The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **For the permanent contact in work areas without heightened risk of injury (e.g.Laboratory) gloves made of the following material are suitable:**
Butyl rubber, BR
Nitrile rubber, NBR
- **For the permanent contact gloves made of the following materials are suitable:**
Butyl rubber, BR
Nitrile rubber, NBR
- **Not suitable are gloves made of the following materials:**
Strong fabric gloves
Leather gloves
- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing

9. Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
Form: Pulver
Color: White
- **Odor:** Odorless
- **Odour threshold:** Not available.
- **pH-value at 20 °C (68 °F):** ≈ 7
- **Change in condition**
Melting point/Melting range: 400 °C (>752 °F)
Boiling point/Boiling range: Not determined.
- **Conditions of flammability**
Flash point: Not available.
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:** Not available.
- **Decomposition temperature:** 320 °C (608 °F)
- **Auto igniting:** Product is not self-igniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
Lower: - Vol %
Upper: - Vol %
- **Vapor pressure:** Not applicable.

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- **Density at 20 °C (68 °F):** ≈3.5 g/cm³ (≈29.208 lbs/gal)
- **Vapour density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
Water at 25 °C (77 °F): 0.6 mg/l
- **Coefficient of water/oil distribution:** Not available.
- **Viscosity:**
Dynamic at 20 °C (68 °F): - mPas
- **Other information:** No further relevant information available.

10. Stability and reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid**
In case of thermal decomposition caused by smouldering and incomplete combustion toxic fumes may be developed.
- **Incompatible materials:** Protect from contamination.
- **Hazardous decomposition products:** None

11. Toxicological information

- **Information on the likely routes of exposure**
- **Delayed and immediate effects and chronic effects from short or long term exposure**
- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
Rare Earth Compound		
Oral	LD50	>5000 mg/kg (rat) (FCR 49, Part 173) Comparable Substance
Dermal	LD50	>2000 mg/kg (rabbit) (FCR 49, Part 173) comparable substance
Inhalative	LC50 (4 h)	>5000 mg/m ³ (rat) (OECD 403) comparable substance

- **Primary irritant effect:**

· on the skin:		
Rare Earth Compound		
Irritation of skin	IS	not irritating (rabbit) (OECD 404) comparable substance
· on the eye:		
Rare Earth Compound		
Irritation of eyes	IS	not irritating (rabbit) (OECD 405) comparable substance

- **Respiratory sensitization:** No further relevant information available.

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· Skin sensitization		
Rare Earth Compound		
Sensitization	EC3	>50 % (guinea pig) (OECD 406) comparable substance

▪ **Additional toxicological information:**

▪ **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
Substance is not listed.		
· NTP (National Toxicology Program)		
Substance is not listed.		
· OSHA-Ca (Occupational Safety & Health Administration)		
Substance is not listed.		
· Repeated dose toxicity		
Rare Earth Compound		
Oral	NOAEL (90 d)	1149(m)-1333(f) mg/kg bw/day (rat) (OECD 408) comparable substance

▪ **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

▪ **Carcinogenicity:** No further relevant information available.

· Mutagenicity		
Rare Earth Compound		
AMES Test	>5 mg/plate (Salmonella typhimurium) (OECD 471) comparable substance negative with and without metabolic activation	

▪ **Reproductive toxicity:** No further relevant information available.

▪ **Specific target organ toxicity (single exposure):** No further relevant information available.

▪ **Specific target organ toxicity (repeated exposure):** No further relevant information available.

▪ **Aspiration hazard:** No further relevant information available.

12. Ecological information

▪ **Toxicity**

▪ **Aquatic toxicity:**

· Fish toxicity		
Rare Earth Compound		
LC50 (96 h)	>100 mg/l (Oncorhynchus mykiss) (OECD 203) comparable substance	
· Water flea toxicity		
Rare Earth Compound		
EC50 (48 h)	>100 mg/l (Daphnia magna) (OECD 202) comparable substance	
NOEC (21 d)	>100 mg/l (Daphnia magna) (OECD 211) comparable substance	
· Bacterial toxicity		
Rare Earth Compound		
EC50 (3 h)	>1000 mg/l (sludge) (OECD 209) comparable substance	

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· Algae toxicity	
Rare Earth Compound	
EC10 (72 h)	30 mg/l (Scenedesmus subspicatus) (OECD 201) comparable substance
EC50 (72 h)	>100 mg/l (Scenedesmus subspicatus) (OECD 201) comparable substance

▪ **Persistence and degradability**

Being an inorganic product, it cannot be removed from water by biological cleaning processes.

▪ **Other information:**

By the insolubility in water there is a separation at every filtration and sedimentation process.

▪ **Behavior in environmental systems:**

▪ **Bioaccumulative potential:** No further relevant information available.

▪ **Mobility in soil:** No further relevant information available.

▪ **Additional ecological information:**

▪ **General notes:**

Due to the consistence and the low watersolubility of the product a bioavailability is not probable.

Do not allow product to reach ground water, water course or sewage system.

▪ **Results of PBT and vPvB assessment:** Not applicable.

▪ **Other adverse effects:** No further relevant information available.

13. Disposal considerations

▪ **Recommendation:**

Disposal must be made according to official regulations.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options.

State/provincial and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state/provincial and local requirements.

14. Transport information

▪ **DOT, ADR, ADN, IMDG, IATA**

▪ **UN-Number:** None

▪ **UN proper shipping name:** None

▪ **Transport hazard class(es) :** None

▪ **Packing group:** None

▪ **Environmental hazards:** Not applicable.

▪ **Special precautions for user:** Not applicable.

▪ **Transport/Additional information:**

Not dangerous according to the above specifications.

15. Regulatory information

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▪ **SARA**

· SARA 302/304
Substance is not listed.

· SARA 313
Substance is not listed.

▪ **SARA 311/312 Immediate (Acute) Health Hazard.**

· TSCA (Toxic Substances Control Act):
Substance is listed.

▪ **Proposition 65**

· Chemicals known to cause cancer:
Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:
Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:
Substance is not listed.

· Chemicals known to cause developmental toxicity:
Substance is not listed.

▪ **Carcinogenic categories**

· EPA (Environmental Protection Agency)
Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)
Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)
Substance is not listed.

▪ **Canadian DSL Substance is not listed.**

· Canadian NDSL
Substance is not listed.

· European EINECS
Substance is listed.

· Philippines Inventory of Chemicals and Chemical Substances PICCS
Substance is not listed.

· Inventory of the Existing Chemical Substances manufactured or imported in China IECSC
Substance is not listed.

· Australian Inventory of Chemical Substances AICS
Substance is not listed.

· Existing and New Chemical Substance List ENCS
Rare Earth Compound

· Korean Existing Chemical Inventory KECI	
Rare Earth Compound	KE-34721

▪ **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

▪ **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard-determining components of labeling:**
Rare Earth Compound
- **Hazard statements**
May cause an allergic skin reaction.
- **Precautionary statements**
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves.
Contaminated work clothing must not be allowed out of the workplace.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Specific treatment (see on this label).
Dispose of contents/container in accordance with
local/regional/national/international regulations.

16. Other information

- This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
- The notes above apply to general operation, please refer to the updated laws and regulations in particular cases.
- There are some unknown hazards of all chemical products, please ensure a safe work environment.
- The document is renewed on October 20, 2016 by Shanghai Nengpu Industrial Co.,Ltd.

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1