# Chemical Safety Data Sheet MSDS / SDS

# LANTHANUM HYDROXIDE

Revision Date: 2024-10-26 Revision Number: 1

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

#### **Product identifier**

Product name : LANTHANUM HYDROXIDE

CBnumber : CB5175929

CAS : 14507-19-8

EINECS Number : 238-510-2

Synonyms: LANTHANUM HYDROXIDE, LANTHANUM(III) HYDROXIDE

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

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.

Uses advised against : none

# **Company Identification**

Company : Chemicalbook

Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing

Telephone : 400-158-6606

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word Danger

## Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P405 Store locked up.

#### Hazard statements

H314 Causes severe skin burns and eye damage

H315 Causes skin irritation

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : LANTHANUM HYDROXIDE

Synonyms: LANTHANUM HYDROXIDE, LANTHANUM(III) HYDROXIDE

CAS : 14507-19-8
EC number : 238-510-2
MF : H3LaO3
MW : 189.93

# SECTION 4: First aid measures

# **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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

## If swallowed

Do NOT induce vomiting. 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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# Special hazards arising from the substance or mixture

Lanthanum oxides

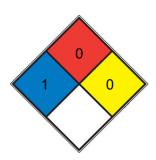
# Advice for firefighters

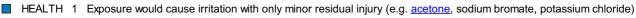
Wear self-contained breathing apparatus for firefighting if necessary.

#### **Further information**

No data available

#### **NFPA 704**





Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete,

■ FIRE 0 stone, and sand. Materials that will not burn in air when exposed to a temperature of 820 °C (1,500 °F) for a period of 5 minutes.(e.g. Carbon tetrachloride)

REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, N2)

SPEC.

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

# **Environmental precautions**

Do not let product enter drains.

# Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. 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

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## Conditions for safe storage, including any incompatibilities

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

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

# **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

Face shield and safety glasses 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. Body Protection

Complete suit protecting against chemicals, 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

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

#### Information on basic physicochemical properties

| Appearance      | white powder      |
|-----------------|-------------------|
| Odour           | No data available |
| Odour Threshold | No data available |

| рН                                      | No data available  |
|---|--------------------|
| Melting point/freezing point            | decomposes [STR93] |
| Initial boiling point and boiling range | No data available  |
| Flash point                             | Not applicable     |
| Evaporation rate                        | No data available  |
| Flammability (solid, gas)               | No data available  |
| Upper/lower flammability or explosive   | No data available  |
| limits                                  |                    |
| Vapour pressure                         | No data available  |
| Vapour density                          | No data available  |
| Relative density                        | No data available  |
| Water solubility                        | No data available  |
| Partition coefficient: n-octanol/water  | No data available  |
| Autoignition temperature                | No data available  |
| Decomposition temperature               | No data available  |
| Viscosity                               | No data available  |
| Explosive properties                    | No data available  |
| Oxidizing properties                    | No data available  |
| Solubility Product Constant (Ksp)       | pKsp: 18.7         |

# Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# **Conditions to avoid**

No data available

# Incompatible materials

Strong acids

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Lanthanum oxides 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

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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

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

**Additional Information** 

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

# **SECTION 12: Ecological information**

# **Toxicity**

No data available

# Persistence and degradability

No data available

# **Bioaccumulative potential**

No data available

# Mobility in soil

#### 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.

#### Other adverse effects

No data available

# **SECTION 13: Disposal considerations**

#### Waste treatment methods

# **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or

mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

# Contaminated packaging

Dispose of as unused product.

# **SECTION 14: Transport information**

# **SECTION 14: Transport information**

IATA:

UN number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

**UN** number

ADR/RID:IMDG:IATA:ADR/RID:IMDG:IATA:

## Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

ADR/RID: 1224 IMDG: 1224 IATA: 1224

ADR/RID: - IMDG: - IATA: -ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 3271 IMDG: 3271 IATA: 3271 ADR/RID: 2811 IMDG: 2811 IATA: 2811 ADR/RID: 2811 IMDG: 2811 IATA: 2811

ADR/RID: - IMDG: - IATA: -

ADR/RID: 1170 IMDG: 1170 IATA: 1170 ADR/RID: 2233 IMDG: 2233 IATA: 2233 ADR/RID: 1989 IMDG: 1989 IATA: 1989

#### **UN proper shipping name**

ADR/RID: CHLOROANISIDINES IMDG: CHLOROANISIDINES IATA: Chloroanisidines

ADR/RID: ETHANOL SOLUTION IMDG: ETHANOL SOLUTION IATA: Ethanol solution

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Risperidone) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Risperidone) IATA: Toxic solid, organic,

n.o.s. (Risperidone)

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Geniposide) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Geniposide) IATA: Toxic solid, organic,

n.o.s. (Geniposide)

ADR/RID: ETHERS, N.O.S. (cis-2,3-Epoxybutane) IMDG: ETHERS, N.O.S. (cis-2,3-Epoxybutane) IATA: Ethers, n.o.s. (cis-2,3-Epoxybutane)

ADR/RID: II IMDG: II IATA: II ADR/RID: - IMDG: - IATA: -

ADR/RID: KETONES, LIQUID, N.O.S. (cycloheptanone) IMDG: KETONES, LIQUID, N.O.S. (cycloheptanone) IATA: Ketones, liquid, n.o.s.

(cycloheptanone)

ADR/RID: - IMDG: - IATA: -

#### Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

ADR/RID: no IMDG Marine pollutant: no IATA: no Special precautions for user Further information Not classified as dangerous in the meaning

of transport regulations.

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

ADR/RID: - IMDG: - IATA: -

ADR/RID: 3 IMDG: 3 IATA: 3

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

# **Packaging group**

ADR/RID: III IMDG: III IATA: III

ADR/RID: II IMDG: II IATA: II

ADR/RID: - IMDG: - IATA: -

ADR/RID: III IMDG: III IATA: III

ADR/RID: III IMDG: III IATA: III

ADR/RID: II IMDG: II IATA: II

No data available

No data available

ADR/RID: III IMDG: III IATA: III

## **Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no

ADR/RID: no IMDG Marine pollutant: no IATA: no ADR/RID: no IMDG Marine pollutant: no IATA: no

#### Special precautions for user

No data available

# SECTION 15: Regulatory information

# Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Regulations on the Safety Management of Hazardous Chemicals

China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

#### Measures for Environmental Management of New Chemical Substances

United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

EC Inventory:Listed.

Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

# SECTION 16: Other information

# Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

# References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
- [3] ECHA European Chemicals Agency, website: https://echa.europa.eu/
- [4] eChemPortal The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- 【10】 Sigma-Aldrich, website: https://www.sigmaaldrich.com/

#### Disclaimer:

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