

Material Safety Data Sheet

Date Printed: 30/JUL/2007
Date Updated: 11/FEB/2006
Version 1.4
Regulation (EC) No 1907/2006

1 - Product and Company Information

Product Name LANTHANUM(III) CHLORIDE HYDRATE, 99.9%
METALS BASIS
Product Number 211605
Company Sigma-Aldrich Pte Ltd
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2 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Irritating to eyes, respiratory system and skin.

3 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
LANTHANUM CHLORIDE HEPTAHYDRATE	10025-84-0	None	None
Formula	LaCl ₃ · xH ₂ O		
Molecular Weight	245.27 AMU		

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

5 - Fire Fighting Measures

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Hygroscopic.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Hand Protection: Compatible chemical-resistant gloves.

Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance

Physical State: Solid

Color: Colorless

Form: Crystals

Property

Value

At Temperature or Pressure

pH

N/A

BP/BP Range

N/A

MP/MP Range

92 °C

Flash Point

N/A

Flammability

N/A

Autoignition Temp	N/A
Oxidizing Properties	N/A
Explosive Properties	N/A
Explosion Limits	N/A
Vapor Pressure	N/A
SG/Density	N/A
Partition Coefficient	N/A
Viscosity	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
Evaporation Rate	N/A
Bulk Density	N/A
Decomposition Temp.	N/A
Solvent Content	N/A
Water Content	N/A
Surface Tension	N/A
Conductivity	N/A
Miscellaneous Data	N/A
Solubility	N/A

10 - Stability and Reactivity

STABILITY

Conditions to Avoid: Moisture.

Materials to Avoid: Strong oxidizing agents, Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Hydrogen chloride gas.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

ACUTE TOXICITY

LD50 LD50
Oral Oral
Rat Rat
4184 mg/kg 4184 mg/kg

LD50 LD50
Intraperitoneal Intraperitoneal
Rat Rat
106 MG/KG 106 MG/KG

LD50 LD50
Intraperitoneal Intraperitoneal
Mouse Mouse
121 MG/KG 121 MG/KG

LD50 LD50
Subcutaneous Subcutaneous
Mouse Mouse
2424 MG/KG 2424 MG/KG

LD50 LD50
Intravenous Intravenous
Mouse Mouse
18 MG/KG 18 MG/KG
Remarks: Liver:Other changes. Liver:Other changes.

LD50 LD50
Intravenous Intravenous
Rabbit Rabbit
148 MG/KG 148 MG/KG

LD50 LD50
Intraperitoneal Intraperitoneal
Guinea pig Guinea pig
129 MG/KG 129 MG/KG
Remarks: Behavioral:Somnolence (general depressed activity).
Behavioral:Food intake (animal). Behavioral:Somnolence (general
depressed activity). Behavioral:Food intake (animal).

LD50 LD50
Intraperitoneal Intraperitoneal
Frog Frog
694 MG/KG 694 MG/KG

SIGNS AND SYMPTOMS OF EXPOSURE

Symptoms of exposure may include burning sensation, coughing,
wheezing, laryngitis, shortness of breath, headache, nausea, and
vomiting.

ROUTE OF EXPOSURE

Skin Contact: Severe skin irritant.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Severe eye irritant.
Inhalation: Material is irritating to mucous membranes and upper
respiratory tract. May be harmful if inhaled.
Ingestion: May be harmful if swallowed.

CHRONIC EXPOSURE - MUTAGEN

Mouse Mouse
30 UMOL/L 30 UMOL/L
Cell Type: Other cell types Other cell types
Morphological transformation. Morphological transformation.

Domestic Animals Domestic Animals
5 MG/KG 5 MG/KG
Intratesticular Intratesticular
sperm sperm

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Mouse Rat
Dose: 112 MG/KG 175 MG/KG
Route of Application: Intraperitoneal Parenteral
Exposure Time: (12D PREG) (10D PREG)
Result: Effects on Fertility: Litter size (e.g.; # fetuses per
litter; measured before birth). Effects on Newborn: Behavioral.

Species: Mouse Mouse
Dose: 112 MG/KG 112 MG/KG
Route of Application: Intraperitoneal Intraperitoneal
Exposure Time: (6D PREG) (12D PREG)
Result: Effects on Fertility: Other measures of fertility
Effects on Fertility: Litter size (e.g.; # fetuses per litter;
measured before birth).

Species: Domestic Animals Mouse
Dose: 5 MG/KG 112 MG/KG

Route of Application: Intratesticular Intraperitoneal
Exposure Time: (1D MALE) (6D PREG)
Result: Paternal Effects: Testes, epididymis, sperm duct.
Paternal Effects: Spermatogenesis (including genetic material,
sperm morphology, motility, and count). Effects on Fertility:
Other measures of fertility

Species: Domestic Animals
Dose: 5 MG/KG
Route of Application: Intratesticular
Exposure Time: (1D MALE)
Result: Paternal Effects: Testes, epididymis, sperm duct.
Paternal Effects: Spermatogenesis (including genetic material,
sperm morphology, motility, and count).

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xi

Irritant.

R-PHRASES: 36/37/38

Irritating to eyes, respiratory system and skin.

S-PHRASES: 36-26

Wear suitable protective clothing. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Caution: Substance not yet fully tested (EU).

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 2

Self-Classification

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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