Date of issue : 16 July, 2003
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Safety Data Sheet

1. Product and company identification

Product name	:	Lanthanum nitrate hexahydrate
Name of manufacturer	:	KANTO CHEMICAL CO., INC.
Address	:	2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, Japan
Name of section	:	Reagent division, catalog and products information section
Telephone number	:	+81-3-6214-1090
Facsimile number	:	+81-3-3241-1047
Mail address	:	BC32@gms.kanto.co.jp
SDS No.	:	24011

2. Summary of danger and Hazard

GHS classification

Physical and chemical hazard

Explosives	:	Out of category
Flammable solids	:	Out of category
Pyrophoric solids	:	Out of category
Self-heating substances and mixtures	:	Out of category
Oxidizing solids	:	Category 3

Human health hazard

Acute toxicity(oral)	:	Out of category
Specific target organ systemic toxicity(single exposure)	:	Category 1
Specific target organ systemic toxicity(repeated exposure)	:	Category 1

Pictogram or symbol

Signal word : Danger

Hazard statement : May intensify fire : oxidizer
Causes damage to organs (blood)
Causes damage to organs (blood) through prolonged or repeated exposure

Cautions

Safety measurements : Keep away from heat.
Keep away from combustible substances.
Do not breathe dust, mist, and vapor.
Do not eat, drink or smoke when using this product.
Wear appropriate protective gloves, glasses, clothing, face shield, or mask.
Wash hands thoroughly after handling.

First-aid measures	:	If exposed, get medical treatment.
		Get medical treatment, if you feel unwell.
Storage	:	Keep away from combustible substances.
		Store locked up.
Disposal	:	Dispose of contents and containers appropriately in accordance with related regulations.

3. Composition/Information on ingredients

Substance/Mixture	:	Substance
Chemical name or commercial name		
	:	Lanthanum nitrate hexahydrate
Ingredients and composition		
	:	Lanthanum nitrate hexahydrate min. 99.0%
Chemical formula	:	$La(NO3)3 \cdot 6H2O$
CAS No.	:	10277-43-7
TSCA Inventory	:	Registered (as anhydrous)
EINECS No.	:	2332380 (as anhydrous)
Dangerous and hazardous ingredients		
	:	Lanthanum nitrate hexahydrate

4. First aid measures

Inhalation	:	Remove the victim to fresh air, and make him blow his nose and gargle.
Skin contact	:	Wash the affected areas under running water.
Eye contact	:	Wash the affected areas under running water for at least 15 minutes. If necessary, get medical treatment.
Ingestion	:	Give the victim water or salt water and induce vomiting. If necessary, get medical attention.

5. Fire fighting measures

Extinguishing media	:	Water, dry chemical powder, carbon dioxide, dry sand, foam
Prohibited extinguishing media		
	:	None
Particular fire fighting	:	Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

6. Accidental release measures

Cautions for personnel	:	Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.
Cautions for environment	:	Attention should be given to avoid discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.
Removal measure	:	Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

7. Cautions of handling and storage

Handling

Engineering measures : Wear proper protective equipment to avoid contact with skin or inhalation of dust. Do not mix with combustible substances like organic compounds, sulfur, phosphorous.

Storage

Adequate storage condition

: Store the bottle tightly closed in a cool, dark place because the substance is hygroscopic.

Keep away from combustible substances.

Safety adequate container materials

: Glass, polyethylene, polypropylene

8. Exposure control/Personal protection

Engineering measures : Install a local ventilation system in case of dusty condition.

Control parameters

ACGIH(2015) : Not established

Protective equipment

Respiration protective equipment

: If necessary, wear dust mask

Hands protective equipment

: Impervious protective gloves

Eyes protective equipment

: Safety goggles

9. Physical and chemical properties

Appearance	:	Crystal
Color	:	Colorless - white
Odor	:	Odorless
Boiling point	:	Decomposition(126℃)
Melting point	:	40℃
Flash point	:	Noncombustible
Density	:	Not available

Solubility

Solubility in solvents : Water ; 61.2%

Organic solvents ; Readily soluble in ethanol, soluble in acetone.

10. Stability and reactivity

Stability : Stable under normal conditions.

Reactivity : The mixture with powdery combustible materials may burn vigorously or explode by heating or shock.

May react with reducing substances.

Incompatible materials : Reducing agent, flammable material

Hazardous decomposition products

: Nitrogen oxides

11. Toxicological information

Acute toxicity : Oral : Out of category

Dermal : Not possible to classify because of insufficient data.

Inhalation(vapor) : Not possible to classify because of insufficient data.

Inhalation(dust, mist) : Not possible to classify because of insufficient data.

rat oral LD50=4500mg/kg

Skin corrosion/irritation : Not possible to classify because of insufficient data.

Serious eye damage/eye irritation

: Not possible to classify because of insufficient data.

Respiratory sensitization or Skin sensitization

: Respiratory sensitization : Not possible to classify because of insufficient data.

Skin sensitization : Not possible to classify because of insufficient data.

Mutagenicity : Not possible to classify because of insufficient data.

Carcinogenic effects : Not possible to classify because of insufficient data

Effects on the reproductive system

: Not possible to classify because of insufficient data.

Specific target organ systemic toxicity single exposure

: Cause damage to organs (blood)(category 1)

There were no reports on human health for the substance concerned. With regard to information for general water-soluble nitrates, it was reported that 15 soldiers who ingested sodium nitrate by mistake instead of table salts became methemoglobinemia. Of them, 13 ingested about 15g died, while two ingested 5 g survived. Based on the information, the substance was classified as category 1 (blood).

Specific target organ systemic toxicity repeated exposure

: Cause damage to organs (blood) through prolonged or repeated exposure(category 1)

As a general chronic toxicity of water soluble nitrate salts, there are many reports that infants who took food and water containing nitrate salts had increased in methemoblobin concentration. Patients who took sodium nitrate or ammonium nitrate as a diuretic, and patients who took ammonium nitrate as an urolithiasis-preventive agent suffered from methemoglobinia. The classification is set to category 1 (blood).

Aspiration hazard : Not possible to classify because of insufficient data.

12. Ecological information

Ecotoxicity

Fish toxicity : Acute aquatic toxicity : Not possible to classify because of insufficient data.

Chronic aquatic toxicity : Not possible to classify because of insufficient data.

Persistence and degradability

: Not available

Bioaccumulative potential : Not available

13. Disposal consideration

Residual disposal	:	Dilute with copious water and adjust the pH to neutral, then flush in drains. Insoluble substances are buried in a landfill site approved for the disposal of chemical and hazardous wastes. Or entrust approved waste disposal companies with the disposal.
Containers	:	In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class	:	Class 5.1(Oxidizing substances) P. G. Ⅲ
UN number	:	1477

Marine regulation information

UN No.	:	1477
Proper shipping name	:	NITRATES, INORGANIC, N.O.S.
Class	:	5.1
Sub risk	:	-
Packing group	:	Ⅲ
Marine pollutant	:	Not applicable

Aviation regulation information

UN No.	:	1477
Proper shipping name	:	Nitrates, inorganic, n.o.s.
Class	:	5.1
Sub risk	:	-
Packing group	:	Ⅲ

15. Regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

References

Encyclopaedia Chemica, Kyoritsu Shuppan Co., Ltd.(1963)

Dangerous Properties of Industrial Materials,6th ed. N.I.Sax Van Nostrand Reinhold Company(1984)

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.The Safety Data Sheet(SDS) is prepared based on JIS Z7253, and it has the same required elements on the Material Safety Data Sheet(MSDS) which is prepared based on JIS Z7250:2010.