

SAFETY DATA SHEET

Preparation Date: 5/17/2017

Revision Date: 5/17/2017

Revision Number: G1

1. IDENTIFICATION

Product identifier

Product code: L1022
Product Name: LANTHANUM NITRATE, REAGENT

Other means of identification

Synonyms: Nitric acid, lanthanum salt, hexahydrate
 Lanthum nitrate hexahydrate
CAS #: 10277-43-7
RTECS # OE5250000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
 14422 South San Pedro St.
 Gardena, CA 90248
 (310) 516-8000.

Order Online At: <https://www.spectrumchemical.com>
Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Oxidizing solids	Category 2

Label elements

Danger

Hazard statements
 Causes skin irritation
 Causes serious eye irritation
 May cause respiratory irritation
 May intensify fire; oxidizer

**Hazards not otherwise classified (HNOC)**

Not Applicable

Other hazards

May be harmful if swallowed

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep/Store away from clothing and other combustible materials
Take any precaution to avoid mixing with combustibles
Wear protective gloves
Wear eye/face protection

Precautionary Statements - Response

IN CASE OF FIRE: Use water to extinguish. Do not use dry chemicals or foams. CO₂ or Halon may provide limited control.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed
Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %
Lanthanum Nitrate, hexahydrate	10277-43-7	100

4. FIRST AID MEASURES**First aid measures****General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation. Causes skin irritation. Irritating to respiratory system. Exposure to nitrites/nitrates can cause gastroenteritis, abdominal pain, nausea, vomiting, diarrhea, metabolic acidosis, purging, methemoglobinemia, cyanosis, muscle weakness, dizziness, lightheadedness, loss of coordination, fatigue, headache, seizures, convulsions, dyspnea, dysrhythmias, coma, and death. Can affect the liver, metabolism (weight loss), blood (methemoglobinemia), cardiovascular system (bradycardia/tachycardia, hypotension, vasodilation, irregular heartbeat), kidneys.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water. CO2 may be of no value in extinguishing fires involving oxidizers and may only provide limited control.

Unsuitable Extinguishing Media: Dry chemical. Foam. Halons.

Specific hazards arising from the chemical

Hazardous Combustion Products: Lanthanum oxides, Nitrogen oxides

Hazardous Combustion Products: No information available.

Specific hazards: Oxidizer. Keep away from combustible materials (wood, paper, oil, clothing, etc.) The product is not flammable, but it may cause fire when in contact with other material. Contact with combustible or organic materials may cause fire. Contact with finely divided (powdered) metals may cause ignition (fire) or explosion. Will accelerate burning when involved in a fire. Container explosion may occur under fire conditions or when heated.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For large fires, flood fire area with water from a distance. Cool affected containers with flooding quantities of water. DO NOT use combustible materials such as sawdust. Do not get water inside containers.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Remove all sources of ignition. Avoid dust formation. Keep combustibles (wood, paper, oil, clothing, etc.) away from spilled material.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Do not use combustible materials such as paper towels, sawdust, clothing, etc. to clean up spill. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Use only in well-ventilated areas. Do not ingest. Do not breathe dust. When using do not smoke. Keep away from combustible material. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Hygroscopic. Protect from moisture. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Reducing agents
Organic materials
Combustible materials
Powdered metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	CAS-No.	OSHA	NIOSH	ACGIH	AIHA WHEEL
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NITRATE, REAGENT

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Lanthanum Nitrate, hexahydrate	10277-43-7	None	None	None	None
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Canada

Components	CAS-No.	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Lanthanum Nitrate, hexahydrate	10277-43-7	None	None	None	None

Australia and Mexico

Components	CAS-No.	Australia	Mexico
Lanthanum Nitrate, hexahydrate	10277-43-7	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles
- Skin and body protection:** Chemical resistant apron
Gloves
Long sleeved clothing
- Respiratory protection:** Effective dust mask. Wear respirator with dust filter. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Crystals.	Color: White.
Odor: Odorless.	Taste No information available.	Formula: La(NO ₃) ₃ .6H ₂ O
Molecular/Formula weight: 433.03 g/mol	Flammability: No information available	Flashpoint (°C/°F): No information available.
Flash Point Tested according to: Not available	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): 40°C/104°F	Decomposition temperature(°C/°F): No information available
Boiling point/range(°C/°F):		

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No information available

Bulk density:
No information available

Density (g/cm³):
No information available

Specific gravity:
No information available

pH:
3-4

Vapor pressure @ 20°C (kPa):
No information available

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

**Partition coefficient
(n-octanol/water):**
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Easily soluble in water
Soluble in Acetone

10. STABILITY AND REACTIVITY

Reactivity

Oxidizer. Reacts with reducing agents, organic material, combustible materials, and powdered metals
Contact with combustible materials (wood, paper, oil, clothing, etc.) may cause fire
Contact with powdered metals may cause fire or explosion
Can react vigorously on contact with reducing materials

Chemical stability

Stability: Hygroscopic. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Exposure to moist air. Exposure to moisture. Ignition sources. Contact with combustible materials (wood, paper, oil, clothing, etc.). Contact with finely divided (powdered) metals. Incompatible materials.

Incompatible Materials:
Reducing agents
Organic materials
Combustible materials
Powdered metals

Hazardous decomposition products: Lanthanum oxides. Nitrogen oxides (NO_x).

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

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Lanthanum Nitrate, hexahydrate	
CAS-No.	10277-43-7

LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rabbit = No information available
LD50/dermal/rat = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 4500 mg/kg oral LD50 rat (for Lanthanum Nitrate (CAS no. 10099-59-9))

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 4500 mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat
VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation.
Eye Contact: Causes serious eye irritation. Symptoms may include stinging, tearing, redness, swelling and blurred vision.
Inhalation Irritating to respiratory system. Symptoms may include wheezing, cough, chest tightness, and shortness of breath. May also cause nausea, vomiting, diarrhea, abdominal pain. Inhalation of high levels of nitrites/nitrates may also cause pulmonary edema. It can also interfere with the ability of the blood to carry oxygen causing headache, dizziness and a blue color to the skin and lips (methemoglobinemia), and other symptoms of methemoglobinemia (see other symptoms under ingestion). Higher levels can cause trouble breathing, circulatory collapse and even death.
Ingestion May be harmful if swallowed.
Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity This product is also a nitrate, therefore nitrate poisoning can occur. Prolonged or repeated nitrate ingestion may affect the urinary system (kidneys) and also may

affect the blood, resulting in methemoglobin with attendant cyanosis, anorexia, hyperpnea and later dyspnea and chocolate brown colored blood. The primary toxic effects of nitrates include orthostatic hypotension and methemoglobinemia, Other symptoms include muscular weakness, faintness, dizziness, lightheadedness, fatigue, throbbing headache, mental impairment, incoordination, seizures, and convulsions, bradycardia or tachycardia, dysrhythmias, dyspnea. Prolonged or repeated ingestion of large amounts of nitrates may affect the liver and can cause gastroenteritis, nausea, vomiting, abdominal pain, weight loss. Possible coma and death.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: IARC group 2A - Listed under Nitrate or Nitrite (ingested) under conditions that result in endogenous nitrosation.

Components	CAS-No.	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Lanthanum Nitrate, hexahydrate	10277-43-7	Group 2A - Probably Carcinogenic to Humans - Monograph 94 [2010] (covers ingested nitrates under conditions that result in endogenous nitrosation)	Not listed	Not listed	Present	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory system.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: No data available.

Persistence and degradability: No information available
Bioaccumulative potential: No information available.
Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal Do not re-use empty containers
 Dispose of as unused product.

Components	CAS-No.	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Lanthanum Nitrate, hexahydrate	10277-43-7	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Class No information available
Packing group: II
Emergency Response Guide Number 140
Marine Pollutant No data available
DOT RQ (lbs): No information available
Special Provisions IB8, IP2, IP4, T3, TP33
Symbol(s): No information available
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

TDG (Canada)

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant No Information available
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

ADR

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Packing Group: II
Subsidiary Risk: No information available
Special Provisions 511
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

IMO / IMDG

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UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
Marine Pollutant: No information available
EMS: F-A
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

RID

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
Special Provisions: 511
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

ICAO

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II
Special Provisions: A3

IATA

UN-No: UN1477
Proper Shipping Name: Nitrates, inorganic, n.o.s.
Hazard Class: 5.1
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 5L
Special Provisions: No information available
Description: UN1477, Nitrates, inorganic, n.o.s., 5.1, II

15. REGULATORY INFORMATION

International Inventories

Components	CAS-No.	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Lanthanum Nitrate, hexahydrate	10277-43-7	Not Listed	Not present	Present	Not present	Present	Present	Not present

U.S. Regulations

Lanthanum Nitrate, hexahydrate
New Jersey RTK Hazardous Substance List: 3722
New Jersey (EHS) List: 3722 500 lb TPQ

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

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Components	CAS-No.	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Lanthanum Nitrate, hexahydrate	10277-43-7	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CAS-No.	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Lanthanum Nitrate, hexahydrate	10277-43-7	None	None	None	Nitrate compounds (water dissociable; reportable only when in aqueous solution)	1.0% de minimis concentration

U.S. TSCA

Components	CAS-No.	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Lanthanum Nitrate, hexahydrate	10277-43-7	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

WHMIS 1988 Hazard Class

C Oxidizing materials

Components

Lanthanum Nitrate, hexahydrate

WHMIS 1988

C

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	CAS-No.	Canada (DSL)	Canada (NDSL)
Lanthanum Nitrate, hexahydrate	10277-43-7	Not Listed	Not Listed

Components	CAS-No.	CEPA Schedule I - Toxic Substances
Lanthanum Nitrate, hexahydrate	10277-43-7	Not listed
Components	CAS-No.	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Lanthanum Nitrate, hexahydrate	10277-43-7	Not listed

EU Classification

EU GHS - SV - CLP 172/2008

Components	CAS-No.	EU GHS - SV - CLP (172/2008)

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EU - CLP (1272/2008)

R-phrase(s)

R 8 - Contact with combustible material may cause fire.
R36/37/38 - Irritating to eyes, respiratory system and skin.

S -phrase(s)

S17 - Keep away from combustible material.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37 - Wear suitable gloves.

Components	CAS-No.	Classification	Concentration Limits:	Safety Phrases
Lanthanum Nitrate, hexahydrate	10277-43-7		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Xi - Irritant.
O - Oxidising.

Xi



O



16. OTHER INFORMATION

Preparation Date: 5/17/2017
Revision Date: 5/17/2017
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet