

Safety Data Sheet

Revision date: 09.02.2023

Version: 7.2

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

1.1 Product identifier

Trade name/designation:	Lanthanum (III) chloride heptahydrate AnalaR NORMAPUR®
Product No.:	10343
CAS No.:	10025-84-0
Other means of identification:	none

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

Relevant identified uses:	General chemical reagent
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1.3 Details of the supplier of the safety data sheet

Singapore

VWR Singapore Pte Ltd.

Street	18 Gul Drive
Postal code/City	Singapore 629468
Telephone	+65 6505 0760
Telefax	+65 6264 3780
E-mail (competent person)	SDS@avantorsciences.com

1.4 Emergency phone number

Telephone	+65 (0) 6505 0760 (office hours: 8 am-5 pm)
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SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Hazard classes and hazard categories	Hazard statements
Substance or mixture corrosive to metals, category 1	H290
Serious eye damage, category 1	H318
Hazardous to the aquatic environment, chronic, category 2	H411
Skin sensitization, category 1	H317

2.2 Label elements

Hazard pictograms



Signal word: Danger

Hazard statements	
H290	May be corrosive to metals.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements	
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P234	Keep only in original container.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P362+P364	Take off contaminated clothing and wash it before reuse.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/...
P321	Specific treatment (see ... on this label).
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P406	Store in a corrosive resistant/... container with a resistant inner liner.
P501	Dispose of contents/container to ...

2.3 Other hazards

none

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name	Lanthanum (III) chloride heptahydrate
Molecular formula	Cl ₃ La.7H ₂ O
Molecular weight	371.37 g/mol
CAS No.	10025-84-0

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Change contaminated, saturated clothing. Wash contaminated clothing before reuse. Do not leave affected person unattended.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Take off immediately all contaminated clothing. Wash off any skin contamination immediately. Call a POISON CENTRE/doctor.

After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist. Immediately call a POISON CENTRE.

In case of ingestion

Rinse mouth thoroughly with water. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor. Never give anything by mouth to an unconscious person or a person with cramps.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Irritant and corrosive effects: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. Cough. Dyspnoea.

4.3 Indication of any immediate medical attention and special treatment needed

No special information on medical attention and special treatment available.

SECTION 5: Firefighting measures

5.1 Extinguishing media**Suitable extinguishing media**

The product itself does not burn.
Co-ordinate fire-fighting measures to the fire surroundings.
Water spray.
Dry extinguishing powder.
Alcohol resistant foam.
Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons

Full water jet.

5.2 Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes.
Do not allow run-off from fire-fighting to enter drains or water courses.
In case of fire: Evacuate area.
In case of fire may be liberated:
Hydrogen chloride (HCl)

5.3 Advice for firefighters

Non-combustible corrosive substances (liquid).
Do not breathe gas/fumes/vapour/spray.
Fight fire with normal precautions from a reasonable distance.
Special protective equipment for firefighters:
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Wear personal protection equipment (refer to section 8). Avoid contact with eyes and skin. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition - No smoking. Provide adequate ventilation. Remove victim out of the danger area. First Aid, decontamination, treatment of symptoms.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Fire hazard.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Dispose according to local legislation. Ventilate affected area.

6.4 Additional information

Personal protection equipment: see section 8 Disposal information: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling

Use extractor hood (laboratory).

Use only in well-ventilated areas.

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

Avoid contact with eyes and skin.

Use personal protective equipment as required.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Measures to prevent fire, aerosol and dust generation

Usual measures for fire prevention.

Use only in well-ventilated areas.

Measures required to protect the environment

Do not empty into drains.

Collect spillage.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 15-25°C

Storage class: 10-13

Keep container tightly closed and in a well-ventilated place. Keep/Store away from combustible materials. Protect from sunlight.

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Packaging materials: Glass Unsuitable

container/equipment material: No further relevant information available.

7.3 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

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

no data available

8.2.2 Personal protection equipment

no data available

Eye/face protection

no data available

Recommendation: no data available

Skin protection

no data available

By short-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time::	> 480 min
Recommended glove articles:	VWR 112-0998

By long-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,38 mm
Breakthrough time::	> 480 min
Recommended glove articles:	VWR 112-3717 / 112-1381

Respiratory protection

no data available

Suitable respiratory protection apparatus:	no data available
Recommendation:	no data available
Suitable material:	no data available
Recommendation:	no data available

Additional information

no data available

8.2.3 Environmental exposure controls

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	solid
Colour:	white
(b) Odour:	no data available
(c) Odour threshold:	no data available

Safety relevant basic data

(d) pH:	5 (100 g/l; H ₂ O; 25 °C)
(e) Melting point/freezing point:	852 °C
(f) Initial boiling point and boiling range:	1750 °C (1013 hPa)
(g) Flash point:	no data available
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	not applicable
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	no data available
(l) Vapour density:	no data available
(m) Density:	no data available
(n) Solubility(ies)	
Water solubility:	861.06 g/l (20°C)
(o) Partition coefficient: n-octanol/water:	no data available
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	not applicable
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable
(u) Particle characteristics:	no nanoform

9.2 Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is non-reactive under normal conditions.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Reaction with:
Oxidising agent, strong

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No known hazardous decomposition products.
Decomposition products in case of fire: see section 5.

10.7 Additional information

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity:

LD50: > 4184 mg/kg - Rat - (RTECS)

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

no data available

Irritant and corrosive effects:

Primary irritation to the skin:

not applicable

Irritation to eyes:

Causes serious eye damage.

Irritation to respiratory tract:

not applicable

Respiratory or skin sensitisation

In case of skin contact: sensitising

After inhalation: not sensitising

STOT-single exposure

not applicable

STOT-repeated exposure

not applicable

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

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects

no data available

Additional information

no data available

11.2 Endocrine disrupting properties:

This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information**12.1 Ecotoxicity****Fish toxicity:**

no data available

Daphnia toxicity:

no data available

Algae toxicity:

no data available

Bacteria toxicity:

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil:

no data available

12.5 Results of PBT/vPvB assessment

not applicable

12.6 Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to the environment.

12.7 Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal. Waste requires monitoring. Send to a hazardous waste incinerator facility under observation of official regulations.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

no data available

SECTION 14: Transport information

Land transport (ADR/RID)

14.1	UN-No.:	1759
14.2	Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (LANTHANUM CHLORIDE HEPTAHYDRATE)
14.3	Class(es):	8
	Classification code:	C10
	Hazard label(s):	8
14.4	Packing group:	III
14.5	Environmental hazards:	Dangerous for the environment
14.6	Special precautions for user:	
	Hazard identification number (Kemler No.):	80
	tunnel restriction code:	E
		(Passage forbidden through tunnels of category E.)

Sea transport (IMDG)

14.1	UN-No.:	1759
14.2	Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (LANTHANUM CHLORIDE HEPTAHYDRATE)
14.3	Class(es):	8
	Classification code:	
	Hazard label(s):	8
14.4	Packing group:	III
14.5	Environmental hazards:	Dangerous for the environment
	Marine pollutant:	Yes (P)
14.6	Special precautions for user:	
	Segregation group:	1
	EmS-No.	F-A S-B
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not relevant

Air transport (ICAO-TI / IATA-DGR)

14.1	UN-No.:	1759
14.2	Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (LANTHANUM CHLORIDE HEPTAHYDRATE)
14.3	Class(es):	8
	Classification code:	
	Hazard label(s):	8
14.4	Packing group:	III
14.5	Special precautions for user:	

SECTION 15: Regulatory information

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

National regulations

- Workplace Safety and Health Act
- Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order
- Environmental Protection and Management Act (EPMA) - Second Schedule, Part 1, Control of Hazardous Substances
- Maritime and Port Authority of Singapore (MPA) - Dangerous Goods, Petroleum and Explosives Regulations

SECTION 16: Other information

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists
 ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
 AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)
 CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures
 DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)
 DNEL - Derived No Effect Level
 Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)
 IATA-DGR - International Air Transport Association-Dangerous Goods Regulations
 ICAO-TI - International Civil Aviation Organization-Technical Instructions
 IMDG - International Maritime Code for Dangerous Goods
 KOSHA - Korea Occupational Safety and Health Agency
 LTV - Long Term Value
 NIOSH - National Institute for Occupational Safety and Health
 OSHA - Occupational Safety & Health Administration
 PBT - Persistent, Bioaccumulative and Toxic
 PNEC - Predicted No Effect Concentration
 RID - Regulation concerning the International Carriage of Dangerous Goods by Rail
 STV - Short Term Value
 SVHC - Substances of Very High Concern
 vPvB - very Persistent, very Bioaccumulative

Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

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Additional information

Indication of changes

general update

If you need an explanation of the change, contact the supplier (SDS@avantorsciences.com).

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.