

SAFETY DATA SHEET

Date Printed: 05/20/2024 **Date Revised:** 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Lanthanum 2-Ethylhexanoate

Product Code: LA-2EH-05

CAS Number: 67816-09-5

Relevant identified uses of the substance: Scientific research and development

Supplier details:

American Elements 10884 Weyburn Ave. Los Angeles, CA 90024 Tel: +1 310-208-0551

Fax: +1 310-208-0351

Emergency telephone number:

+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS) GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.

GHS08 Health hazard

Repr. 2

H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Hazards not otherwise classified

No data available

GHS label elements

GHS label elements, including precautionary statements

Hazard pictograms







Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H361 Suspected of damaging fertility or the unborn child.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

Precautionary statements

P210

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P280

Wear protective gloves / protective clothing.

P273

Avoid release to the environment.

P243

Take precautionary measures against static discharge.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P315

Get immediate medical advice/attention.

WHMIS classification

B2 - Flammable liquid

D2A - Very toxic material causing other toxic effects

Classification system

HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

Health (acute effects) = 2

Flammability = 3

Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances

CAS No. / Substance Name:

67816-09-5 Lanthanum(III) 2-ethylhexanoate, 10% w/v in hexane

SECTION 4. FIRST AID MEASURES

Description of first aid measures

If inhaled:

Supply patient with fresh air. If not breathing, provide artificial respiration. Keep patient warm.

Seek immediate medical advice.

In case of skin contact:

Immediately wash with soap and water; rinse thoroughly.

Seek immediate medical advice.

In case of eye contact:

Rinse opened eye for several minutes under running water. Consult a physician.

If swallowed:

Seek medical treatment.

Information for doctor

Most important symptoms and effects, both acute and delayed

No data available

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents

CO2, sand, extinguishing powder. Do not use water.

Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

Metal oxide fume

Advice for firefighters

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

Environmental precautions:

Do not allow material to be released to the environment without official permits.

Methods and materials for containment and cleanup:

Keep away from ignition sources.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Prevention of secondary hazards:

Keep away from ignition sources.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Handling

Precautions for safe handling

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Information about protection against explosions and fires:

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away.

Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well-sealed containers.

Specific end use(s)

No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:

n-Hexane

ppm

ACGIH TLV 50 (skin)

Austria MAK 50

Belaium TWA 50

Denmark TWA 25

Finland TWA 50; 150-STEL

France VME 50

Germany MAK 50

Hungary TWA 100; 200-STEL

Japan OEL 40 (skin)

Korea TLV 50 (skin)

Netherlands MAC-TGG 25

Norway TWA 25

Poland TWA 100; 400-STEL

Russia TWA 40: 300-STEL

Sweden NGV 25; 50-KTV

Switzerland MAK-W 50; 100-KZG-W

United Kingdom TWA 20

USA PEL 500

Additional information:

No data

Exposure controls

Personal protective equipment

Follow typical protective and hygienic practices for handling chemicals.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Inspect gloves prior to use.

Suitability of gloves should be determined both by material and quality, the latter of which may vary by

manufacturer. Eye protection: Safety glasses Body protection:

Protective work clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Form: Liquid Odor: Petrol-like

Odor threshold: No data available.

pH: No data available.

Melting point/Melting range: No data available Boiling point/Boiling range: No data available Sublimation temperature / start: No data available

Flash point: -22 °C (-8 °F) (n-hexane)

Flammability (solid, gas) No data available.

Ignition temperature: 225 °C (437 °F) (n-hexane) Decomposition temperature: No data available

Autoignition: No data available.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures is

possible.

Explosion limits:

Lower: 1.2 Vol % (n-hexane) Upper: 7.5 Vol % (n-hexane) Vapor pressure: No data available

Density: No data available

Relative density
No data available.
Vapor density
No data available.
Evaporation rate
No data available.

Solubility in Water (H₂O): Not miscible or difficult to mix Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: No data available. Kinematic: No data available.

Other information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with strong oxidizing agents

Conditions to avoid

No data available

Incompatible materials:

Oxidizing agents

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Metal oxide fume

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

No effects known.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Causes skin irritation.

Eye irritation or corrosion:

May cause irritation

Sensitization:

No sensitizing effects known.

Germ cell mutagenicity:

No effects known.

Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC,

NTP, OSHA or ACGIH.

Reproductive toxicity:

Suspected of damaging fertility or the unborn child.

Specific target organ system toxicity - repeated exposure:

May cause damage to organs through prolonged or repeated exposure.

Specific target organ system toxicity - single exposure:

May cause drowsiness or dizziness.

May cause respiratory irritation.

Aspiration hazard:

May be fatal if swallowed and enters airways.

Subacute to chronic toxicity: n-Hexane causes skin irritation, CNS effects, lung irritation, headache, dizziness, drowsiness, Repeated or prolonged exposure to the vapor can cause peripheral polyneuropathy. Symptoms include incoordination, slowed reaction time, blurred vision, slurred speech, facial numbness, loss of senstaiion. Gradual recovery is normally found after removal from exposure. Also causes reproductive effects in laboratory animals.

Lanthanons can cause delayed blood clotting leading to hemorrhages.

Exposure may also lead to sensitivity to heat, itching, increased awareness of odor and taste, and liver damage.

Subacute to chronic toxicity:

No effects known.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Ecotoxical effects:

Remark:

Toxic for aquatic organisms

Additional ecological information:

Do not allow material to be released to the environment without official permits.

Toxic for aquatic organisms

Do not allow product to reach groundwater, water courses, or sewage systems, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

Toxic to aquatic life.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Results of PBT and vPvB assessment

PBT:

N/A

vPvB:

N/A

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation

Consult official regulations to ensure proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number DOT, IMDG, IATA

UN1208 UN proper shipping name DOT Hexanes **IMDG** HEXANES, MARINE POLLUTANT IATA **HEXANES** Transport hazard class(es) DOT Class 3 Flammable liquids. Label 3 Class 3 (F1) Flammable liquids Label 3 **IMDG** Class 3 Flammable liquids.

Label

3

IATA

Class

3 Flammable liquids.

Label

3

Packing group

DOT, IMDG, IATA

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Environmental hazards:

Environmentally hazardous substance, liquid; Marine Pollutant

Marine pollutant (IMDG):

Symbol (fish and tree)

Special precautions for user

Warning: Flammable liquids

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N/A

Transport/Additional information:

DOT

Marine Pollutant (DOT):

No

Remarks:

Special marking with the symbol (fish and tree).

UN "Model Regulation":

UN1208, Hexanes, 3, II

SECTION 15. REGULATORY INFORMATION

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

SARA Section 313 (specific toxic chemical listings)

Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer

Substance is not listed.

Prop 65 - Developmental toxicity

Substance is not listed.

Prop 65 - Developmental toxicity, female

Substance is not listed.

Prop 65 - Developmental toxicity, male

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006.

Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use)

Substance is not listed.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements 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 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.