

SAFETY DATA SHEET

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SECTION 1. IDENTIFICATION

Product Identifier: (3N) 99.9% Lanthanum 2-Ethylhexanoate

Product Code: LA-2EH-03

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



GHS02 GHS07 GHS08

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) = 2Flammability = 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.

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 Ш 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.