

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Lanthanum Molybdate

Chemical Formula: La₂Mo₂O₉

Manufacturer Item Number: LA-2555

Manufacturer: Lorad Chemical Corporation
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2. HAZARD IDENTIFICATION

Signal Word: Warning

Pictograms:



Hazard Statements: H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.

Precautionary Statements: P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P304+340+312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER / doctor if you feel unwell.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+313 If exposed or concerned: Get medical advice / attention.
P337+313 If eye irritation persists: Get medical advice / attention.
P403+233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents / container to an approved waste disposal plant.

HMIS Ratings (0-4)

- Health: 3
- Flammability: 0
- Physical: 0

3. COMPOSITION

Additional Names: Lanthanum Molybdenum Oxide, LMO, Lanthanum Molybdate(VI), lanthanum(3+) salt (1:2)

Percentage: 100 wt%

CAS #: 16231-00-8
EC #: No Data Available.

4. FIRST AID PROCEDURES

General Treatment Consult a physician. Show this SDS to the doctor in attendance. Move out of dangerous area.

Special Treatment: No Data Available.

Important Symptoms: No Data Available.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Skin: Wash off with soap and plenty of water. Consult a physician.

Eyes: Immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Consult a physician.

5. FIREFIGHTING MEASURES

Flammability: Not Flammable.

Special Hazards from Substance: May evolve hazardous lanthanum oxide or molybdenum oxide fumes in fire.

Extinguishing Media: Use water spray, alcohol resistant foam, dry chemical, or carbon dioxide.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

If Material is Released / Spilled: Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Pick up and arrange disposal without creating dust. Sweep up or vacuum up spillage and collect in suitable container for disposal. Dispose of waste in accordance with applicable federal, state, local, and provincial environmental regulations.

Environmental Precautions: Prevent further leakage or spills if safe to do so. Do not allow to enter drains, sewers, or watercourses.

7. HANDLING AND STORAGE

Handling Conditions: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Storage Conditions: Keep container tightly closed in a dry and well-ventilated place.

Work / Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide appropriate exhaust ventilation at places where dust is formed.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Permissible Exposure Limits:	Authority	Basis	Limit	Remarks
	OSHA	PEL	5 mg/m ³	Molybdenum (soluble compound, as Mo) (up to 8-hour time weighted average)
	California	PEL	0.5 mg/m ³	Molybdenum (soluble compound, as Mo) (up to 8-hour time weighted average)
	NIOSH	REL	5 mg/m ³	Molybdenum (soluble compound, as Mo) (up to 10-hour time weighted average)
	OSHA	PEL	15 mg/m ³	Molybdenum (insoluble compound - total dust, as Mo) (up to 8-hour time weighted average)
	California	PEL	10 mg/m ³	Molybdenum (insoluble compound - total dust, as Mo) (up to 8-hour time weighted average)
	California	PEL	3 mg/m ³	Molybdenum (insoluble compound - respirable, as Mo) (up to 8-hour time weighted average)

Threshold Limit Value:	Authority	Basis	Limit	Remarks
	ACGIH	TLV	0.5 mg/m ³	Molybdenum (soluble compound - respirable, as Mo) (up to 8-hour time weighted average)
	ACGIH	TLV	10 mg/m ³	Molybdenum (insoluble compound - inhalable, as Mo) (up to 8-hour time weighted average)
	ACGIH	TLV	3 mg/m ³	Molybdenum (insoluble compound - respirable, as Mo) (up to 8-hour time weighted average)

Special Equipment: No Data Available.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection: Safety glasses with side-shields. Use equipment for eye protection tested and approved under government standards such as NIOSH (US) or EN 166 (EU).

Body Protection: Wear appropriate protective clothing. The use of bodily protective equipment must be determined according to the concentration and amount of the substance at the specific workplace.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

Color:	white	Molecular Weight:	613.69 g/mol
Forms:	powder	Theoretical Density:	5.56 g/cm ³
Odor:	No Data Available.	pH:	No Data Available.
Water Solubility:	0.00179gm/100gm H ₂ O at 25°C	Auto-Ignition Temperature:	No Data Available.
Boiling Point:	No Data Available.	Evaporation Rate:	No Data Available.

Melting Point / Freezing Point:	No Data Available.	Flammability or Explosive Limits:	No Data Available.
Vapor Pressure:	No Data Available.	Partition Coefficient: n-octanol/ water	No Data Available.
Vapor Density:	No Data Available.	Decomposition Temperature:	No Data Available.
Flash Point:	No Data Available.	Viscosity:	No Data Available.

10. REACTIVITY

Stability: Stable under recommended storage conditions.

Reacts with: Strong oxidizing agents, strong acids

Incompatible Conditions: Avoid moisture.

Hazardous Decomposition Products: Lanthanum oxides, Molybdenum oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Eyes: Causes serious eye irritation.

Skin: No Data Available.

Ingestion: No Data Available.

Inhalation: May cause respiratory irritation.

Chronic Toxicity

Skin Corrosion / Irritation: No Data Available.

Serious Eye Damage / Irritation: No Data Available.

Respiratory / Skin Sensitization: No Data Available.

Mutagenic Effects: No Data Available.

Reproductive / Teratogenic Effects: No Data Available.

Specific Target Organ Toxicity: (single exposure) No Data Available.

Specific Target Organ Toxicity: (repeated exposure) No Data Available.

Aspiration Hazard: No Data Available.

Other Adverse Effects: 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. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Carcinogenicity:

IARC: 2B - Group 2B: Possible carcinogenic to humans.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. ECOLOGICAL INFORMATION

Aquatic Toxicity: No Data Available.

Persistence and degradability: No Data Available.

Bioaccumulative potential: No Data Available.

Notes: No Data Available.

13. DISPOSAL CONSIDERATIONS

Disposal: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. TRANSPORTATION DATA

Hazardous: **DoT:** Not Dangerous Goods.
IMDG: Not Dangerous Goods.
IATA: Not Dangerous Goods.

Pictogram: N/A

Hazard Class: N/A

Packing Group: N/A

UN Number: N/A

US DoT **Proper Name:** N/A

Marine Pollutant:

IMDG **Proper Name:** N/A

EMS-No:

IATA **Proper Name:** N/A

15. REGULATORY INFORMATION

Toxic Substance Control Act Not Listed.

SARA 302 Components No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components This material does not contain any chemical components with known CAS numbers that exceed the threshold (de minimus) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards Acute Health Hazard.

Massachusetts Right to Know Components No components are subject to the Ma. Right to Know Act.

Pennsylvania Right to Know Components Lanthanum Molybdate (CAS No. 16231-00-8)

New Jersey Right to Know Components Lanthanum Molybdate (CAS No. 16231-00-8)

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm. This product is known to the State of California as a hazardous substance except when in a mixture, suspension, or where inhalable dust or particles are not present or cannot be formed.

16. OTHER INFORMATION

Copyright 2020 Lorad Chemical Corporation. 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 does not constitute a hazard assessment and should not be used in place of the user's own assessment of work place risks as required by other health and safety legislation. The information in this sheet does not represent a guarantee of the properties of the product. Lorad Chemical Corporation and its Affiliates make no warranty with respect to the accuracy of the information or the suitability of this product for any particular application, and shall not be held liable for any damage resulting from handling or from contact with the above product.

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