

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Magnesium Oxide

Chemical Formula: MgO

Manufacturer Item Number: N/A

Manufacturer: Lorad Chemical Corporation
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2. HAZARD IDENTIFICATION

Signal Word: Not a Hazardous Substance or Mixture.

Pictograms: N/A

Hazard Statements: N/A

Precautionary Statements: N/A

HMIS Health Ratings (0-4)

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

3. COMPOSITION

Additional Names: Magnesium Monoxide; Magnesia; Maglite; Calcined Brucite

Percentage: 100 wt%

CAS #: 1309-48-4

EC #: 215-171-9

4. FIRST AID PROCEDURES

General Treatment Consult a physician. Show this SDS to the physician 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.

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

Skin: Wash off with soap and plenty of water.

Eyes: Flush eyes with water as a precaution.

5. FIREFIGHTING MEASURES

Flammability: Not Flammable.

Special Hazards from Substance: Magnesium Oxide

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. Avoid breathing dust. Pick up and arrange dispose without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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: 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. Air and moisture sensitive.

Work / Hygienic Maintenance: Do not eat, drink, or smoke when working with this product. Wear protective gloves and wash skin thoroughly after handling. Keep formation of airborne dusts to a minimum. Guard against dust accumulation. In case of insufficient ventilation, wear suitable respiratory equipment.

Ventilation: Keep in well ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

| Permissible Exposure Limits: | Authority | Basis | Limit | Remarks |
|------------------------------|-----------|-------|------------------------|---|
| | OSHA | PEL | 15.0 mg/m ³ | Magnesium Oxide fumes - total particulate, Table Z-1 Limits for Air Contaminants (8-hour time weighted average) |

| Threshold Limit Value: | Authority | Basis | Limit | Remarks |
|------------------------|------------|-------|------------------------|---|
| | California | PEL | 10.0 mg/m ³ | Magnesium Oxide fumes - total particulate, California permissible exposure limits for chemical contaminants (Title 8, Article 107) (8-hour time weighted average) |
| | ACGIH | TLV | 10.0 mg/m ³ | Magnesium Oxide fumes - total particulate, Inhalable (8 hour time weighted average) |

Special Equipment: Use proper lab equipment while handling this product.

Respiratory Protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher levels of protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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 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.

SAFETY DATA SHEET

Eye Protection: Safety glasses with side shield. 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.

9. PHYSICAL AND CHEMICAL CHARACTERISTICS

| | | | |
|--|-------------------------|--|------------------------|
| Color: | White | Molecular Weight: | 40.3 g/mol |
| Forms: | Powder | Density: | 3.58 g/cm ³ |
| Odor: | No Data Available. | pH: | No Data Available. |
| Water Solubility: | Insoluble | Auto-Ignition Temperature: | No Data Available. |
| Boiling Point: | > ~3,600°C (> ~6,512°F) | Evaporation Rate: | No Data Available. |
| Melting Point / Freezing Point: | > ~2,852°C (> ~5,166°F) | 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; May react violently with: Phosphorus Pentachloride, Chlorine Trifluoride, Performic Acid, Bromine Pentafluoride, other Strong Acids; Powdered metals

Incompatible Conditions: Air Sensitive.

Hazardous Decomposition Products: Under fire conditions may form Magnesium oxide fumes.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: May irritate eyes.

Skin: May irritate nose.

Ingestion: Ingestion of large quantity may cause a feverish reaction and leukocytosis, diarrhoea.

Inhalation: Inhalation of large quantity may cause a feverish reaction and leukocytosis, diarrhoea.

Chronic: No Data Available.

Signs and Symptoms: Exposure to Magnesium Oxide may cause "metal fume fever." This is a flu-like illness with symptoms of metallic taste in the mouth, headache, fever, and chills, aches, chest tightness, and cough. The symptoms may be delayed for several hours after exposure and usually last for a day or two.

Aggravate Medical Conditions: No Data Available.

Median Lethal Dose: No Data Available.

Carcinogen: This product has shown intratracheal carcinogenicity in hamsters. Equivocal tumorigenic agent by RTECS criteria. Sense organs and special senses (nose, eye, ear, and taste): Olfaction: Tumors. Lungs, Thorax, or Respiration: Tumors.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

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. Empty containers should be taken to an appropriate waste handling site for recycling or disposal. Dispose of in accordance with local, state, or national regulations.

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

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

IMDG: N/A

IATA: N/A

15. REGULATORY INFORMATION

SARA 302 Components No chemicals 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 minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards No SARA Hazards.

Massachusetts Right to Know Components Magnesium Oxide (CAS No. 1309-48-4).

Pennsylvania Right to Know Components Magnesium Oxide (CAS No. 1309-48-4).

New Jersey Right to Know Components

Magnesium Oxide (CAS No. 1309-48-4).

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.

16. OTHER INFORMATION

Copyright 2018 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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