

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND CONTACT INFORMATION

Product Name: Magnesium Oxide

AR 144

Alpha Resources, Inc.
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2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	%W	CHEMICAL NAMES	OSHA PEL (mg/m3)	ACGIH TLV (mg/m3)
1309-48-4	100	Magnesium Oxide	15	10

3. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: Can be irritating, causing redness, tearing or conjunctivitis.

SKIN: Can be irritating, causing drying, chapping and dermatitis.

INHALATION: Dust may irritate nasal passages and respiratory tract. Inhalation of freshly generated magnesium oxide fume may result in metal fume fever (symptoms include fever, chills, perspiration, cough, nasal irritation, chest pain, nausea, headaches, vomiting and muscular weakness; these may be delayed 1 – 3 hours).

INGESTION: Ingestion generally causes purging of the bowels; however, swallowing large amounts may lead to bowel obstruction.

CHRONIC OVEREXPOSURE: Not available.

ACUTE OVEREXPOSURE: Prolonged/frequent skin contact may lead to dermatitis.

MEDICAL CONDITIONS AGGRAVATED: As with exposure to any environment without adequate personal protection, inhalation of magnesium oxide dust or fume may aggravate any pre-existing respiratory diseases.

CARCINOGENICITY: None.

4. FIRST AID MEASURES

EYES: Do not rub eyes. Wash eyes under slowly running water for at least 15 minutes, making sure eyes area held wide open and moved slowly in every direction. Ensure no solid particles remain in creases of eyelids. If so, continue to wash. Get medical attention if irritation persists.

INHALATION: Removed from exposure to fresh air immediately. Do not permit exposed person to remain in dusty environment without adequate respiratory protection. Treat metal fume fever with bed rest and treat for fever and pain.

SKIN: Remove from source of irritation. Remove contaminated clothing and wash affected area thoroughly with a mild soap and water. Wash contaminated clothing before reusing.

INGESTION: Treat symptomatically. If bowel obstruction occurs, immediately consult a physician.

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5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

Non-flammable

Flash Point: Not available

Flammable Limits: (% by Volume in Air): Lower: None Upper: None

AUTO-IGNITION TEMPERATURE: N/A

HAZARDOUS COMBUSTION PRODUCTS: None.

EXTINGUISHING MEDIA: Use media appropriate to primary source of fire. Otherwise use dry chemical, carbon dioxide, water spray or foam.

FIREFIGHTING INSTRUCTIONS: Avoid breathing dust or fumes; keep upwind.

6. ACCIDENTAL RELEASE MEASURES

SMALL/LARGE SPILL: Ventilate enclosed spaces and use appropriate respiratory protection.

Sweep or vacuum spilled material in a manner to avoid generation of dust. Reclaim product for re-use, if possible, or collect and seal in DOT-approved containers for disposal in an appropriate manner.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with eyes; avoid breathing dust or fume and use only in a well-ventilated area. Consumption of food and beverages should be avoided in work area where product is being used. After handling product, always wash hands and face thoroughly with soap and water before eating drinking or smoking.

STORAGE: Keep container closed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local and general mechanical dust collection and ventilation in accordance with good engineering practices should be provided to maintain dust levels below exposure limits in section 2.

RESPIRATORY PROTECTION:

Up to 100 mg/m³: Any dust, mist or fume respirator; any air supplied respiratory; or self-contained breathing apparatus.

Up to 250 mg/m³: Any supplied air respiratory operated in a continuous flow mode or any powered air purifying respiratory with a dust/mist/fume filter.

Up to 500 mg/m³: High efficiency particulate filter with full face piece; any powered air supplied respirator with a tight-fitting face piece and a high efficiency particulate filter; any self-contained breathing apparatus with a full face piece; any supplied air respirator with a full face piece.

Up to 750 mg/m³: Any air supplied respirator with full face piece and operated in a pressure demand or other positive pressure mode.

Emergency or entry into unknown concentrations: Self-contained breathing apparatus with full face piece and operate in pressure demand mode or air supplied respirator with full face piece operated in a pressure demand or other positive pressure mode in combination with auxiliary self-contained breathing apparatus operated in pressure demand or positive pressure mode.

Escape: Any air purifying full face piece respirator with high efficiency particulate filter or any appropriate escape type self-contained apparatus.

SKIN AND HAND PROTECTION: Dust-impervious gloves during manual handling of product.

EYE AND FACE PROTECTION: Safety glasses with side shields or tight-fitting goggles.

OTHER PROTECTIVE EQUIPMENT: Long-sleeved, buttoned collar, long pants extended over shoes or coveralls.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: dry, white power to granular solid

BOILING POINT: 6479 F (3582 C)

FREEZE-MELT POINT: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

SOLUBILITY IN WATER: slightly soluble

SPECIFIC GRAVITY: 3.5-3.6

pH: -10 saturated solution

ODOR: None

PERCENT VOLATILES: N/A

EVAPORATION RATE: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

INCOMPATIBILITY: Strong Acids (heat generated), aluminum powder (may ignite/explode when heated), bromine pentafluoride (violent reaction), bromine trifluoride (may ignite), interhalogens (may ignite), magnesium powder (may ignite/explode when heated), strong oxidizers (violent reaction), phosphorus pentachloride (incandesces brilliantly on heating) and sublimed sulfur (may ignite/explode when heated) .

HAZARDOUS DECOMPOSITION PRODUCTS: If heated to the point of volatilization, magnesium oxide fumes may be generated.

HAZARDOUS POLYMERIZATION: None.

11. TOXICOLOGICAL INFORMATION

Human inhalation TCLo: 400 mg/m³

12. ECOLOGICAL INFORMATION

None available.

13. DISPOSAL CONSIDERATION

Dispose of in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

USA DOT: Not regulated

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

TSCA STATUS: On toxic Substance Control Inventory

CERCLA Reportable Quantity: None

RCRA Status: Not regulated

SARA TITLE III:

Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazardous Categories: Acute

Section 313 Toxic Chemicals: None

CANADAIN REGULATIONS
WHMIS: Not Regulated

16. OTHER INFORMATION

Hazard Index: (0-4, 4= Extreme)
Health: 1 Fire: 0 Reactivity: 0

SUPPLEMENTAL INFORMATION

The data and information as stated was furnished by the manufacturer/vendor &/or supplier of this product. Alpha Resources, Inc. cannot warrant the accuracy of this information and shall not be responsible or liable for any damage that may result, should any of the information be erroneous.

Date Prepared: January 11, 2013
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