



Cambridge Isotope Laboratories, Inc.  
50 Frontage Road  
Andover, MA 01810

Number:  
Issue Date

MLM-1533  
04/04/11

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## MATERIAL SAFETY DATA SHEET

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### 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Description    MAGNESIUM-24 METAL (24MG)

Cambridge Isotope Laboratories, Inc.  
50 Frontage Rd  
ANDOVER, MA 01810  
USA

E-mail                      cilsales@isotope.com  
Web Site                    www.isotope.com

#### Phone Numbers

Emergency Contact    Chemtrec  
Emergency Phone      1-800-424-9300 (24 hours)  
  
Customer Service      1-800-322-1174 (8:30-5:30 EST)  
Phone  
Transportation        1-202-483-7616 (24 hours)

### 2 HAZARDS IDENTIFICATION

#### OSHA Hazards

Flammable solid, Target Organ Effect

#### Target Organs

Central nervous system, Kidney, Cardiovascular system

#### GHS Classification

Self-heating substances and mixtures (Category 1)  
Substances and mixtures, which in contact with water, emit flammable gases (Category 1)

#### GHS Label Information

Signal Word              Danger

#### Hazards Identification

Flame

#### Hazard Statement(s)

Self-heating; may catch fire.  
In contact with water releases flammable gases which may ignite spontaneously.

#### Precautionary Statement(s)



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Keep away from contact with water, possibility of violent reaction/flash fire.  
Handle under inert gas. Protect from moisture.  
Keep cool. Protect from sunlight.

In case of fire: Use ... for extinction.  
Store contents under ...

### HMIS Ratings

Chronic Health	*
Physical	2
Flammability	0
Health	2

### NFPA Codes

Fire	0
Health	2
Reactivity	2

### Potential Health Effects

Eyes	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

### Composition / Information on Ingredients

Chemical Formula	Mg
Molecular Weight	24.0
CAS No.	7439-95-4 (unlabeled)
EC No.	231-104-6
Index No.	012-001-00-3

## 4 FIRST AID MEASURES

### First Aid Measures

Eyes	Flush eyes with water as a precaution.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation	If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.



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Skin	Wash with soap and plenty of water. Consult a physician.
Additional Information	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### 5 FIRE FIGHTING MEASURE

#### Fire Fighting Measures

Extinguishing Media	In case of fire use Carbon dioxide CO2 Dry powder. NEVER use water.
Fire Fighting Equipment	Wear self contained breathing apparatus for fire fighting if necessary.

### 6 ACCIDENTAL RELEASE MEASURES

#### Accidental Release Measures

Personal Precautions	Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleanup	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations. Do not flush with water. Keep in suitable, closed containers for disposal.

### 7 HANDLING AND STORAGE

#### Precautions for Safe Handling

Handling	Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking.
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#### Conditions for Safe Storage

Storage	Store at room temperature away from light and moisture.
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### 8 EXPOSURE CONTROL / PERSONAL PROTECTION

#### Personal Protection



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Eyes - Face	Wear safety glasses with side shields (or goggles) and a face shield.
Skin	Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory	When appropriate, use NIOSH/CEN approved respirator.
Protective Clothing	Wear suitable protective clothing and gloves.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties (Unlabeled Compound)

Form	Chips
pH	No data available
Melting Point	648 °C (1,198 °F) - lit
Boiling Point	1,090 °C (1,994 °F) - lit
Flashpoint	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Vapor Pressure	1 hPa (1 mmHg) at 621 °C (1,150 °F)
Solubility in Water	No data available
Auto Ignition Temperature	510 °C (950 °F)

### 10 STABILITY AND REACTIVITY

Stability and Reactivity

Chemical Stability	Stable if stored under recommended conditions.
Possibility of Hazardous Reactions	Reacts violently with water.
Conditions to Avoid	Exposure to moisture.



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Hazardous  
decomposition  
products

Formed under fire conditions: Magnesium oxide

Materials to avoid

Strong oxidizing agents, acids, Acid chlorides, Halogens

### 11 TOXICOLOGICAL INFORMATION

#### Acute Toxicity

LC50 Inhalation Rat

Serious No data available

Damage/Eye  
Irritation

Skin

No data available

Corrosion/Irritation

Inhalation

No data available

Respiratory or Skin  
Sensitization

Not available

Germ Cell  
Mutagenicity

Not available

IARC

No component of the product present at levels greater than or equal to 0.1 % is identifiable as probable, possible, or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identifiable 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.

Reproductive  
Toxicity

Not available

#### Specific Target Organ Toxicity

Single Exposure No data available

Repeated Exposure No data available

#### Other Information

RTECS OM2100000



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### 12 ECOLOGICAL INFORMATION

#### Toxicity

Persistence and  
Degradability Not available

Bioaccumulative  
Potential Not available

Mobility in Soil Not available

PBT and vPvB  
Assessment Not available

Other Adverse  
Effects Not available

### 13 DISPOSAL CONSIDERATIONS

#### Disposal Considerations

Product Disposal Waste materials should be disposed of under conditions which meet Federal, State, and Local environmental control regulations.

### 14 TRANSPORT INFORMATION

#### Transportation Information-DOT/IATA/IMDG

UN Number 1869  
Prop. Ship. Name Magnesium  
Hazard Class 4.1  
Packing Group III  
Marine Pollutant No  
Poison Inhalation  
Hazard No

### 15 REGULATORY INFORMATION

#### Regulatory Information

Flammable solid, Target Organ Effect



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SARA

Component

Component

Fire (Y/N)	Y
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Chronic (Y/N) Y

Massachusetts	Yes
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## Right to Know

Pennsylvania Right Yes

to Know

New Jersey Right      Yes

## to Know

California Proposition 65	This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
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DSL Status All components are on the Canadian DSL list.

Hazard Flammable. Irritant.

Keep container tightly closed and dry.

After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer).

Highly flammable.

Contact with water liberates extremely flammable gases.

## 16 OTHER INFORMATION

Additional MSDS Information	This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.
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