

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 478.00

Revision Date: April 21, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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## Magnesium Oxide

Flinn Scientific, Inc. P.O. Box 219 Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300

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### SECTION 2 — COMPOSITION, INFORMATION ON INGREDIENTS

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Magnesium oxide

Synonym: magnesia

CAS#: 1309-48-4

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### SECTION 3 — HAZARDS IDENTIFICATION

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White powder. Odorless.

Inhalation may cause respiratory irritation. Slight eye irritant.

#### FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-1

Exposure-1

Storage-1

0 is low hazard, 3 is high hazard

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### SECTION 4 — FIRST AID MEASURES

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Call a physician and seek medical attention for further treatment, observation, and support after first aid.

Inhalation: Remove to fresh air at once. If breathing has stopped, give artificial respiration immediately.

Eye or External: Immediately flush with fresh water for at least 15 minutes.

Internal: Rinse mouth. Give large quantities of water for dilution. Call a physician or poison control at once.

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### SECTION 5 — FIRE FIGHTING MEASURES

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Noncombustible solid.

#### NFPA CODE

None  
established

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### SECTION 6 — ACCIDENTAL RELEASE MEASURES

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Restrict unprotected personnel from the area. Sweep up the spill, place in a sealed bag or container, and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

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### SECTION 7 — HANDLING AND STORAGE

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Flinn Suggested Chemical Storage Pattern: Inorganic #4. Store with hydroxides, oxides, silicates, and carbonates.

Store in a cool, dry place. Air and moisture sensitive. Store in a Flinn Chem-Saf bag.

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### SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

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Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and a chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits. Always wear a NIOSH-approved respirator with proper cartridges or a positive pressure, air-supplied respirator when handling this material in emergency situations (spill or fire).

Exposure guidelines: PEL 15 mg/m<sup>3</sup> (as total dust) (OSHA)

**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

White, odorless powder.

Solubility: Only slightly soluble in water. Soluble in acids and ammonium salts solutions.

Formula: MgO

Formula weight: 40.32

Boiling point: 3600 °C

Melting point: 2800 °C

Specific gravity: 2.4 (varies)

**SECTION 10 — STABILITY AND REACTIVITY**

Avoid contact with strong oxidizers and acids.

Shelf life: Fair to poor.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

Acute effects: Irritant, laxative effect.

Chronic effects: N.A.

Target organs: N.A.

ORL-RAT LD<sub>50</sub>: N.A.

IHL-RAT LC<sub>50</sub>: N.A.

SKN-RBT LD<sub>50</sub>: N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

**SECTION 12 — ECOLOGICAL INFORMATION**

Data not yet available.

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Please review all federal, state and local regulations that may apply, before proceeding.

Flinn Suggested Disposal Method #26a is one option.

**SECTION 14 — TRANSPORT INFORMATION**

Shipping name: Not regulated

Hazard class: N/A

UN number: N/A

N/A = Not applicable

**SECTION 15 — REGULATORY INFORMATION**

TSCA-listed, EINECS-listed (215-171-9).

**SECTION 16 — OTHER INFORMATION**

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**Consult your copy of the *Flinn Science Catalog/Reference Manual*  
for additional information about laboratory chemicals.**