

# FLINN SCIENTIFIC, INC.

## Material Safety Data Sheet (MSDS)

MSDS #: 480.00

Revision Date: November 22, 2011

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### SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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#### Magnesium Sulfate

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 sulfate anhydrous or heptahydrate

Synonym: Epsom salts

CAS#: 7487-88-9 (anhydrous), 10034-99-8 (heptahydrate)

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### SECTION 3 — HAZARDS IDENTIFICATION

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White powder. Odorless.

Avoid inhalation. May irritate eyes and respiratory tract.

Avoid body tissue contact.

#### FLINN AT-A-GLANCE

Health-0

Flammability-0

Reactivity-0

Exposure-1

Storage-0

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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Nonflammable 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 #2. Store with acetates, halides, sulfates, sulfites, thiosulfates, and phosphates.

Store in a cool, dry place.

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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 exhaust ventilation to keep airborne concentrations low.

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**SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES**

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White, odorless powder.

Specific gravity: 2.65 (for anhydrous) 1.678 (for hydrous).

Solubility: Very soluble in water. Soluble in glycerol. Anhydrous decomposes at 1124 °C.

Formula:  $MgSO_4 \cdot 7H_2O$  or  $MgSO_4$  (Anhydrous)

Formula weight: 246.50 or 120.37

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**SECTION 10 — STABILITY AND REACTIVITY**

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Shelf life: Poor, hygroscopic; store in a Flinn Chem-Saf bag.

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**SECTION 11 — TOXICOLOGICAL INFORMATION**

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Acute effects: Irritant, abdominal pain.

ORL-RAT  $LD_{50}$ : N.A.

Chronic effects: N.A.

IHL-RAT  $LC_{50}$ : N.A.

Target organs: Central nervous system, GI system.

SKN-RBT  $LD_{50}$ : N.A.

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

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**SECTION 12 — ECOLOGICAL INFORMATION**

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Data not yet available.

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**SECTION 13 — DISPOSAL CONSIDERATIONS**

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

Flinn Suggested Disposal Method #26a is one option.

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**SECTION 14 — TRANSPORT INFORMATION**

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Shipping name: Not regulated

Hazard class: N/A

UN number: N/A

N/A = Not applicable

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**SECTION 15 — REGULATORY INFORMATION**

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TSCA-listed, EINECS-listed (231-298-2).

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**SECTION 16 — OTHER INFORMATION**

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