



## Material Safety Data Sheet

### Magnesium Sulfate, Heptahydrate, ACS

#### Section 1 - Chemical Product and Company Identification

**MSDS Name:**

Magnesium Sulfate, Heptahydrate, ACS

**Catalog Numbers:**

LC16490

**Synonyms:**

Epsom salts

**Company Identification:**

LabChem Inc

200 William Pitt Way

Pittsburgh, PA 15238

**Company Phone Number:**

(412) 826-5230

**Emergency Phone Number:**

(800) 424-9300

**CHEMTREC Phone Number:**

(800) 424-9300

#### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
10034-99-8	Magnesium sulfate heptahydrate	100

#### Section 3 - Hazards Identification

##### Emergency Overview

**Appearance:** Colorless solid**Caution!** May cause eye, skin, and respiratory tract irritation. May cause central nervous system depression. The toxicological properties of this material have not been fully investigated.**Target Organs:** Central nervous system, gastrointestinal system

##### Potential Health Effects

**Eye:**

May cause mild eye irritation.

**Skin:**

May cause skin irritation.

**Ingestion:**

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. The toxicological properties of this substance have not been fully investigated.

**Inhalation:**

May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

**Chronic:**

Exposure to high concentrations may cause central nervous system depression.



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### Section 4 - First Aid Measures

**Eyes:**

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:**

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:**

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

Treat symptomatically and supportively.

**Antidote:**

The use of calcium gluconate to precipitate the oxalate should be determined by only qualified medical personnel.

### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

**Extinguishing Media:**

Use extinguishing media most appropriate for the surrounding fire.

**Autoignition Temperature:**

Not applicable.

**Flash Point:**

Not applicable.

**NFPA Rating:**

CAS# 10034-99-8: H- 1, F- 0, I- 0

**Explosion Limits:**

Lower: n/a Upper: n/a

### Section 6 - Accidental Release Measures

**General Information:**

Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.



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#### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:**

Store in a cool, dry place.

#### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:**

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits:**

Chemical Name:	ACGIH	NIOSH	OSHA
Magnesium sulfate heptahydrate	none listed	none listed	none listed

**OSHA Vacated PELs:**

Magnesium sulfate heptahydrate: No OSHA Vacated PELs are listed for this chemical.

#### Personal Protective Equipment

**Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:**

Wear appropriate protective gloves to prevent skin exposure.

**Clothing:**

Wear appropriate protective clothing to prevent skin exposure.

**Respirators:**

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

#### Section 9 - Physical and Chemical Properties

<b>Physical State:</b>	Solid
<b>Color:</b>	Transparent to white
<b>Odor:</b>	Odorless
<b>pH:</b>	5.0 – 8.2 (5% solution)
<b>Vapor Pressure:</b>	Not available
<b>Vapor Density:</b>	Not available
<b>Evaporation Rate:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Boiling Point:</b>	Not available
<b>Freezing/Melting Point:</b>	Not available
<b>Decomposition Temperature:</b>	1124°C



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Solubility in water: Soluble  
Specific Gravity/Density: 1.678  
Molecular Formula:  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$   
Molecular Weight: 246.48

### Section 10 - Stability and Reactivity

**Chemical Stability:**

Stable under normal temperatures and pressures.

**Conditions to Avoid:**

Dust generation, excess heat.

**Incompatibilities with Other Materials:**

No significant incompatibilities identified with common materials and contaminants.

**Hazardous Decomposition Products:**

Oxides of sulfur.

**Hazardous Polymerization:**

Will not occur.

### Section 11 - Toxicological Information

**RTECS:**

CAS# 10034-99-8: OM4508000

**LD50/LC50:**

CAS# 10034-99-8: Not available.

**Carcinogenicity:**

CAS# 10034-99-8: Not listed by ACGIH, IARC, NTP, or California Prop 65.

California: None

**Epidemiology:**

No information found

**Teratogenicity:**

No information found

**Reproductive:**

No information found

**Mutagenicity:**

No information found

**Neurotoxicity:**

No information found

### Section 12 - Ecological Information

No information found.



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### Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

### Section 14 - Transport Information

#### US DOT

**Shipping Name:** Not regulated  
**Hazard Class:**  
**UN Number:**  
**Packing Group:**

### Section 15 - Regulatory Information

#### US Federal

##### TSCA:

CAS# 10034-99-8 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

##### SARA Reportable Quantities (RQ):

None of the chemicals in this material have an RQ.

##### CERCLA/SARA Section 313:

No chemicals are reportable under Section 313.

##### OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### US State

##### State Right to Know:

CAS# 10034-99-8 is not present on state lists from California, Pennsylvania, Minnesota, Massachusetts, Florida, or New Jersey.

##### California Regulations:

None of the chemicals in this product are listed.

#### European/International Regulations

##### Canadian DSL/NDSL:

CAS# 10034-99-8 is listed on Canada's DSL List.

##### Canada Ingredient Disclosure List:

CAS# 10034-99-8 is not listed on the Canadian Ingredient Disclosure List

### Section 16 - Other Information

MSDS Creation Date: June 28, 2007

Revision Date: None

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