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\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

Magnesium Sulfate Anhydrous  
13510

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: Magnesium Sulfate Anhydrous  
Catalog Numbers:  
S80067, M65 3, M65 500, M65-100LB, M65-3, M65-500, M65100LB, M653, M65500  
Synonyms:  
Magnesium Sulfate; Epsom Salts  
Company Identification: Fisher Scientific  
1 Reagent Lane  
Fairlawn, NJ 07410  
For information, call: 201-796-7100  
Emergency Number: 201-796-7100  
For CHEMTREC assistance, call: 800-424-9300  
For International CHEMTREC assistance, call: 703-527-3887

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#
7487-88-9	Sulfuric acid magnesium salt (1:1)	100	231-298-2

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: transparent.  
Caution! May cause eye and skin irritation. May cause respiratory and digestive tract irritation.  
Target Organs: None.

Potential Health Effects

Eye:  
May cause mild eye irritation.  
Skin:  
May cause skin irritation.  
Ingestion:  
Causes gastrointestinal irritation with nausea, vomiting and diarrhea.  
Inhalation:  
May cause respiratory tract irritation.  
Chronic:  
No information found.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:  
Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid.  
Skin:  
Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Remove contaminated clothing and shoes.  
Ingestion:  
If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.  
Inhalation:  
Remove from exposure 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:  
Material will not burn.  
Extinguishing Media:  
Use extinguishing media most appropriate for the surrounding fire.  
Autoignition Temperature: Not available.  
Flash Point: Not available.  
NFPA Rating: Not published.  
Explosion Limits, Lower: Not available.  
Upper: Not available.

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated in Section 8.

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Spills/Leaks:  
Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:  
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation.  
Storage:  
Store in a tightly closed container.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:  
Use adequate ventilation to keep airborne concentrations low.

Chemical Name	Exposure Limits		
	ACGIH	NIOSH	OSHA - Final PELs
Sulfuric acid magnesium salt (1:1)	none listed	none listed	none listed

OSHA Vacated PELs:  
Sulfuric acid magnesium salt (1:1):  
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 a respirator's use.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Solid  
Appearance: transparent  
Odor: odorless  
pH: Not available.  
Vapor Pressure: 1 mm Hg @ 20  
Vapor Density: Not available.  
Evaporation Rate: Not available.  
Viscosity: Not available.  
Boiling Point: Not available.  
Freezing/Melting Point: decomposes  
Decomposition Temperature: 1124 deg C  
Solubility: Soluble in water.  
Specific Gravity/Density: 2.66  
Molecular Formula: MgSO4  
Molecular Weight: 120.3626

\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

Chemical Stability:  
Stable under normal temperatures and pressures.  
Conditions to Avoid:  
Incompatible materials.  
Incompatibilities with Other Materials:  
Moisture. Explosive when heated with ethoxyethyl alcohols.  
Hazardous Decomposition Products:  
Sulfur oxides (SOx), including sulfur oxide and sulfur dioxide.  
Hazardous Polymerization: Has not been reported.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#:  
CAS# 7487-88-9: OM4500000  
LD50/LC50:  
Not available.  
Carcinogenicity:  
Sulfuric acid magnesium salt (1:1) -  
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.  
Epidemiology:  
No data available.

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Teratogenicity:  
No data available.  
Reproductive Effects:  
No data available.  
Neurotoxicity:  
No data available.  
Mutagenicity:  
No data available.  
Other Studies:  
No data available.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity:  
Not available.  
Environmental Fate:  
Not available.  
Physical/Chemical:  
Not available.  
Other:  
Not available.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.  
RCRA D-Series Maximum Concentration of Contaminants:  
None listed.  
RCRA D-Series Chronic Toxicity Reference Levels: None listed.  
RCRA F-Series: None listed.  
RCRA P-Series: None listed.  
RCRA U-Series: None listed.

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

US DOT  
No information available  
IMO  
No information available.  
IATA  
No information available.  
RID/ADR  
No information available.  
Canadian TDG  
No information available.

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

US FEDERAL

TSCA  
CAS# 7487-88-9 is listed on the TSCA inventory.  
Health & Safety Reporting List  
None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b  
None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule  
None of the chemicals in this material have a SNUR under TSCA.  
SARA  
Section 302 (RQ)  
None of the chemicals in this material have an RQ.  
Section 302 (TPQ)  
None of the chemicals in this product have a TPQ.  
SARA Codes  
CAS # 7487-88-9: acute.  
Section 313  
No chemicals are reportable under Section 313.  
Clean Air Act:  
This material does not contain any hazardous air pollutants.  
This material does not contain any Class 1 Ozone depleters.  
This material does not contain any Class 2 Ozone depleters.  
Clean Water Act:  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.  
OSHA:  
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

Sulfuric acid magnesium salt (1:1) is not present on state lists from CA, PA, MN, MA, FL, or NJ.  
California No Significant Risk Level:  
None of the chemicals in this product are listed.  
European/International Regulations  
European Labeling in Accordance with EC Directives

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Hazard Symbols: Not available.  
Risk Phrases:  
Safety Phrases:  
WGK (Water Danger/Protection)  
CAS# 7487-88-9: 0

Canada

CAS# 7487-88-9 is listed on Canada's DSL/NDSL List.  
This product has a WHMIS classification of Not controlled.  
CAS# 7487-88-9 is not listed on Canada's Ingredient Disclosure List.  
Exposure Limits

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

MSDS Creation Date: 3/13/1995 Revision #7 Date: 12/12/1997

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