



SAFETY DATA SHEET

Preparation Date: 7/10/2014

Revision date 11/27/2018

Revision Number: G2

1. Identification

Product identifier

Product code: M1064
Product Name: MAGNESIUM SULFATE, ANHYDROUS, POWDER, CP

Other means of identification

Synonyms: Magnesium sulphate
Sulfate de magnesium (French)
Sulfato de magnesio (Spanish)
Sulfuric acid, magnesium salt (1:1)
Sulfuric acid, magnesium salt
Epsom salt
Epsom salts
CAS #: 7487-88-9
RTECS # OM4500000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: In fertilizers, matches, mineral water, catalyst carriers, cosmetics, dietary supplements, plastics, detergents, ceramics, fireproofing fabrics, paper sizing, tanning leather, dyeing textiles.

Uses advised against No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300

Contact Person: Martin LaBenz (West Coast)

Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

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Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula:	CAS No	Weight-%
Magnesium Sulfate, Anhydrous	7487-88-9	100

4. FIRST AID MEASURES

First aid measures

General Advice:	National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops.
Eye Contact:	Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. In case of shortness of breath, give oxygen. Obtain medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye/skin irritation

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

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Hazardous combustion products

No information available.

Specific hazards:

No information available.

Special Protective Actions for Firefighters

Specific Methods:

No information available

Special Protective Equipment for Firefighters:

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental precautions

No information available.

Methods and material for containment and cleaning up

Methods for containment

Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:

Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

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Formula:	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Magnesium Sulfate, Anhydrous	7487-88-9	None	None	None	None

Canada

Formula:	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Magnesium Sulfate, Anhydrous	7487-88-9	None	None	None	None

Australia and Mexico

Formula:	CAS No	Australia	Mexico
Magnesium Sulfate, Anhydrous	7487-88-9	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Safety glasses with side-shields. or Goggles
Skin and body protection:	Long sleeved clothing Chemical resistant apron Gloves
Respiratory protection:	Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid	Appearance: Crystalline powder. Crystals. Crystalline.	Color: White.
Odor: Odorless.	Taste Saline. Bitter.	Formula: MgSO4
Molecular/Formula weight (g/mole): 120.37	Flammability (solid, gas) no data available	Flashpoint (°C/°F): No information available

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Flash Point Tested according to: Not applicable	Autoignition Temperature (°C/°F): No information available	Lower Explosion Limit (%): No information available
Upper Explosion Limit (%): No information available	Melting point/range(°C/°F): No information available	Decomposition temperature(°C/°F): 1124 °C/2055.2 °F
Boiling point/range(°C/°F): No information available	Bulk density: No information available	Density (g/cm3): 2.66
Specific gravity: 2.66	pH No information available	Vapor pressure @ 20°C (kPa): No information available
Evaporation rate: No information available	Vapor density: No information available	VOC content (g/L): No information available
Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): No information available	Viscosity: No information available
Miscibility: No information available	Solubility: Soluble in Water Insoluble in Acetone Soluble in hot alcohol Soluble in Glycerol Solubility in Ether: 1 g/250 ml Solubility in Water: 20 g/100 ml @ 0 deg. C; 73.8 g/100 ml @ 100 deg. C; 360 g/l @ 20 deg. C	

10. STABILITY AND REACTIVITY

Reactivity

It reacts with Calcium Hydroxide to form Magnesium Hydroxide. It reacts with arsenates, phosphates, tartrates, precipitating corresponding magnesium salts. Lead, barium, strontium and calcium react with Magnesium Sulfate resulting in precipitation of respective sulfates

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials.

Incompatible Materials: Oxidizing agents

Hazardous decomposition products: Sulfur oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Magnesium Sulfate, Anhydrous	
CAS No	7487-88-9

LD50/oral/rat = No information available

LD50/oral/mouse = No information available

LD50/dermal/rabbit = No information available

LD50/dermal/rat = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

Value No information available

LD50/oral/mouse =

Value - Acute Tox Oral = No information available

LD50/dermal/rabbit

Value No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause irritation of respiratory tract.

Ingestion It can be ingested in large amounts and is not absorbed from the gastrointestinal tract unless there is blockage or injury. It has a purging or laxative effect. It may cause gastrointestinal tract irritation with nausea, vomiting, hypermotility, diarrhea. When absorbed from the gastrointestinal tract in the case of blockage or injury, it may cause flushing, sweating, and affect behavior/central nervous system (muscle

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weakness, central nervous system depression, somnolence, convulsions), peripheral nervous system (flaccid paralysis), cardiovascular system (cardiac arrhythmias, hypotension), blood (changes in serum composition), respiration (respiratory depression, apnea), liver, brain (degenerative changes). It may also cause hypoglycemia, hypermagnesemia.

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.

Sensitization: No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Formula:	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Magnesium Sulfate, Anhydrous	7487-88-9	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organs: No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Magnesium Sulfate, Anhydrous - 7487-88-9

Algae/aquatic plants EC50: =2700mg/L (72h, *Desmodesmus subspicatus*)

Fish LC50: 2610 - 3080mg/L (96h, *Pimephales promelas*) LC50: =19000mg/L (24h, *Lepomis macrochirus*)

Crustacea EC50: 266.4 - 417.3mg/L (48h, *Daphnia magna*) EC50: =1700mg/L (24h, *Daphnia magna*)

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Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Formula:	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Magnesium Sulfate, Anhydrous	7487-88-9	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated

Proper Shipping Name: No information available

Hazard Class No information available

Subsidiary Class No information available

Packing group: No information available

Emergency Response Guide Number No information available

Marine Pollutant No data available

DOT RQ (lbs): No information available

Special Provisions No Information available

Symbol(s): No information available

Description: No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name: No information available

Hazard Class No information available

Subsidiary Risk: No information available

Packing Group: No information available

Marine Pollutant No Information available

Description: No information available

ADR

UN Number -

Proper Shipping Name: No information available

Transport hazard class(es) No information available

Packing group No information available

Subsidiary Risk: No information available

IMDG

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Marine Pollutant No information available

RID

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available

ICAO (air)

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class No information available
Subsidiary Risk: No information available
Packing Group: No information available

IATA

UN Number Not Regulated
Proper Shipping Name: No information available
Transport hazard class(es) No information available
Subsidiary Risk: No information available
Packing group No information available
Precautionary Statements - Response IF exposed or concerned
Special Provisions No information available

15. REGULATORY INFORMATION

International Inventories

Formula:	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
<i>Magnesium Sulfate, Anhydrous</i>	7487-88-9	PresentACTIVE	Present KE-22752	Present	Present (1)-467	X	X	Present 231-298-2

U.S. Regulations

Magnesium Sulfate, Anhydrous

FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 184.1443

FDA - 21 CFR - Total Food Additives 184.1443

- List Sourced from EAFUS

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Formula:	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive	Female Reproductive

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				Toxicity	Toxicity:
Magnesium Sulfate, Anhydrous	7487-88-9	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Formula:	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Magnesium Sulfate, Anhydrous	7487-88-9	None	None	None	None	None

U.S. TSCA

Formula:	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Magnesium Sulfate, Anhydrous	7487-88-9	Not Applicable	Not Applicable

Canada

WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information: Not a dangerous product according to HPR classification criteria.

Component Magnesium Sulfate, Anhydrous 7487-88-9 (100)	WHMIS 2015 Hazard Classification Not a dangerous product according to HPR classification criteria
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Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

Formula:	CAS No	Canada (DSL)	Canada (NDSL)
Magnesium Sulfate, Anhydrous	7487-88-9	Present	Not Listed

Formula:	CAS No	CEPA Schedule I - Toxic Substances
Magnesium Sulfate, Anhydrous	7487-88-9	Not listed
Formula:	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Magnesium Sulfate, Anhydrous	7487-88-9	Not listed

EU Classification

EU GHS - SV - CLP 1272/2008

Formula:	CAS No	EU GHS - SV - CLP (1272/2008)
Magnesium Sulfate, Anhydrous	7487-88-9	

EU - CLP (1272/2008)

R-phrases(s)

none

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S -phrase(s)

none

Formula:	CAS No	Classification	Concentration Limits:	Safety Phrases
Magnesium Sulfate, Anhydrous	7487-88-9		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

Not dangerous

16. OTHER INFORMATION

Preparation Date: 7/10/2014
Revision date 11/27/2018
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet