



Issue Date 7 January 2020

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Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<u>Product identifier</u> Product Name	Magnesium Sulfate	
Other means of identification		
Product Code	Magnesium Sulfate	
Synonyms	Magnesium Sulfate Monohydrate	
Recommended use of the chemical	and restrictions on use	
Recommended Use	Agriculture.	
Uses advised against	No information available	
Details of the supplier of the safety data sheet		
Manufacturer Address		
Chemurgic Agricultural Chemicals, Inc. P.O. Box 2106 Turlock CA 95381		
I UHUCK CA 9550 I		
Emergency telephone number		
Company Phone Number	209-634-2951	
24 Hour Emergency Phone Number 209-652-7260		
Emergency Telephone INFOTRAC	1-800-535-5053	
	2. HAZARDS IDENTIFICATION	

Classification

OSHA Regulatory Status White or transparent crystalline odorless powder. Noncombustable. At very high temperatures, magnesium oxide, sulfur dioxide and

sulfur trioxide may be generated. No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.

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

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Granular to fine granular

Physical state Solid

Odor None

Causes mild irritation to the eyes No known adverse effects. Causes nausea, vomiting, abdominal cramps and diarrhea. Spilled material can be slippery.

Hazards not otherwise classified (HNOC) Other Information

Unknown Acute Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

Magnesium sulfate, monohydrate

Chemical Name	CAS No.	Weight-%	Trade Secret
magnesium sulfate, monohydrate	14168-73-1	100	

4. FIRST AID MEASURES

First aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. (Call a
	physician if irritation persists).

Skin Contact Not Applicable.

Inhalation Remove to fresh air. Administer oxygen if breathing is difficult. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Ingestion If large quantities of this material are swallowed, call a physician immediately. Do NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

This material is compatible with all extinguishing media.

Unsuitable extinguishing media None.

Specific hazards arising from the chemical

See Section 2 for information on hazards when this material is present in the area of a fire.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions 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

Wear goggles. See Section 8.

Environmental precautions		
Environmental precautions	Sinks and mixes with water. No adverse effects known.	
Methods and material for containm	ient and cleaning up	
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Sweep, scoop or vacuum discharged material. Flush residue with water.	
Prevention of secondary hazards	For large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry Do not touch or walk through spilled material. Sweep, scoop or vacuum discharged materia Flush residue with water. Observe environmental regulations.	
	7. HANDLING AND STORAGE	
Precautions for safe handling		
Advice on safe handling	Avoid breathing dust. Promptly clean up spills.	
Conditions for safe storage, includ	ling any incompatibilities	
Storage Conditions	Keep containers closed and protected from extremes of temperature and humidity during storage. Recommended storage conditions 68-110°F and 54-87% relative humidity.	
Incompatible materials	Metal hydrides and other water reactive materials.	
8. EX	POSURE CONTROLS/PERSONAL PROTECTION	
Control parameters		
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational	
Appropriate engineering controls	exposure limits established by the region specific regulatory bodies.	
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Showers. Eyewash stations.	
Individual protection measures, su	ich as personal protective equipment	
Eye/face protection	Wear chemical goggles.	
Skin and body protection	Wear gloves if abrasion or irritation occurs.	
Respiratory protection	Provide workers with NIOSH approved respirators in accordance with requirements of 29 CFR 1910. 134 for level of exposure incurred.	
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.	
	9. PHYSICAL AND CHEMICAL PROPERTIES	
Information on basic physical and	chemical properties	
Physical state Appearance Color	Solid Granular to fine granular Odor None White or transparent Odor threshold No information available	

Color	White or transparent	Odor threshold	No information available
<u>Property</u> pH	<u>Values</u> Approx. 6-7	Remarks • Method	

Melting point/freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density Specific Gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties	No information available No information available 1.76g/cm ³ 71g/100ml at 20°C 91g/100ml at 40°C No information available No information available
Other Information	
Softening point Molecular weight VOC Content (%) Density Bulk density	No information available No information available No information available No information available 60-70 lb/ft3

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Metal hydrides and other water reactive materials.

Hazardous Decomposition Products

At very high temperatures, magnesium oxide, sulfur dioxide and sulfur trioxide may be generated.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	Irritating to eyes.

Skin Contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms

No information available.

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

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

This material is not persistent in aquatic systems.

Persistence and degradability

No information available.

Bioaccumulation

Material does not bioaccumulate.

Mobility

Sinks and mixes with water.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Disposal of wastes	This product does not exhibit any characteristics of a hazardous waste. The product is suitable for landfill disposal. Follow all applicable federal, state and local regulations for safe disposal.
Contaminated packaging	Do not reuse container.

14. TRANSPORT INFORMATION

DOT

Not regulated by DOT as a hazardous material. No hazard class, label or placard required, no UN or NA number assigned.

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply
ENCS	Complies
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories	
Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

None

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION					
<u>NFPA</u>	Health hazards 1	Flammability	0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 1	Flammability	0	Physical hazards 0	Personal protection X
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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet