



SAFETY DATA SHEET
According to 29 CFR 1910.1200

MAGNESIUM SULFATE

Date of issue: July 15, 2012 Revision date: September 01, 2023 Version: 4

SECTION 1.- IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product form Substance
Substance name Magnesium Sulfate Heptahydrate
CAS No. 10034-99-8
Formula $MgSO_4 \cdot 7H_2O$
Synonyms Epsom salt.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture Fertilizers

1.3 Details of the supplier of the safety data sheet

Pima Chemicals & Fertilizers, LLC
1370 Nogales, Az.
Tel. 011 52 (662) 182-0559
rgutierrez@qpima.com
www.qpima.com

Química Pima, S.A. de C.V.
Del Cobre 20, Parque Industrial Hermosillo.
Hermosillo, Sonora, México. C.P. 83297
Tel. 011 (662) 251-0010 ventas@pima.com

1.4 Emergency telephone number

Emergency number CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

SECTION 2.- HAZARD IDENTIFICATION

2.1. GHS-US classification

Specific target organ toxicity (single exposure) 3 H335
Acute toxicity - oral 5 H303
Full text of H-phrases: see section 16.

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US):

Warning

Hazard statement (GHS-US):

H303 May be harmful if swallowed.

H335 May cause respiratory irritation.

Precautionary statements (GHS-US):

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P270 Do not eat, drink, or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.



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P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P403+P233 Store in a well-ventilated place. Keep the container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

None to our knowledge.

2.4 Unknown acute toxicity (GHS-US)

Not applicable.

SECTION 3.- COMPOSICION / INFORMATION OF INGREDIENTS

3.1 Substance

Substance type Mono-constituent

Name	Product identifier	%	GHS-US classification
Magnesium Sulfate Heptahydrate	(CAS No.) 10034-99-8	> 99.00	STOS-SE 3, H335 Acute toxicity - oral 5, H303

3.2 Mixture

Not applicable

SECTION 4.- FIRST AID MEASURE

4.1. Description of first aid measure

First-aid measures general

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

First-aid measures after eye contact

Rinse immediately with plenty of water. Obtain medical attention if pain, blinking, or redness persists.

First-aid measures after skin contact

Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by a warm water rinse.

First-aid measures after inhalation

Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Get medical attention.

First-aid measures after ingestion

Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries

Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indications of any immediate medical attention and special treatment needed

Treat symptomatically. Obtain medical assistance.

SECTION 5.- FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

Do not use a heavy water stream.

5.2. Special hazard arising from the substance or mixture



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Fire hazard	No additional information available.
Explosion hazard	No additional information available.
Reactivity	No additional information available.

5.3. Advice for firefighters

Precautionary measures fire	Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighborhood close doors and windows.
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6.- ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	Safety glasses. Gloves. Dust mask.
Emergency procedures	Evacuate unnecessary personnel.
Measures in case of dust release	In case of dust production: keep upwind. Dust production: have neighborhood close doors and windows.

6.1.2. For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refers to section 8 Exposure controls/personal protection"
Emergency procedures	Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up.

Method for containment	Contain released substance, and pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, and cut off the supply. Knock down/dilute dust cloud with water spray.
Methods for cleaning up	On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
Other information	Dispose of materials or solid residues at an authorized site.

6.4 Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7.- HANDLING AND STORAGE

7.1. Precautions for safe handling

Precautions for safe handling	Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Hygiene measures	Do not drink, eat, or smoke in the workplace. Always wash your hands after handling the product. Do not eat, drink, or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities



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Storage conditions	Keep only in the original container in a cool, well-ventilated place away from incompatible materials. Keep container closed when not in use.
Incompatible products	Strong bases.
Heat-ignition	KEEP SUBSTANCE AWAY FROM: Sources of ignition. Direct sunlight.
Storage area	Store in a dry area. Store at room temperature. Keep container in a well-ventilated place.
Special rules on packaging	SPECIAL REQUIREMENTS: closing. Dry. Correctly labeled. Meet the legal requirements. Secure fragile packaging in solid containers.
Packaging materials	No additional information available.
7.3 Specific end use(s)	No additional information available.

SECTION 8.- EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Magnesium sulfate, heptahydrate 10034-99-8	Not available	Not available	Not available

8.2. Exposure controls

Appropriate engineering controls	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment	Dust production: dust mask with filter type P2. Gloves. Safety glasses.
Material for protective clothing	GIVE GOOD RESISTANCE: Rubber.
Hand protection	Gloves.
Eye protection	Chemical goggles or safety glasses.
Skin and body protection	Protective clothing.
Respiratory protection	Dust production: dust mask with filter type P2.
Environmental exposure controls	Avoid release to the environment.

SECTION 9.- PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Solid.	Appearance:	Crystalline solid. Powder. Grains.
Odor:	No data available.	Color:	Colorless to white.
Molecular mass			246.48 g/mol
Odor threshold			No data available
pH			5 - 8.2
pH solution			5%
Relative evaporation rate (butyl acetate=1)			No data available
Melting point			No data available
Freezing point			No data available
Boiling point			No data available
Flash point			No data available



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Self-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapor pressure	< 0.1 mmHg
Relative vapor density at 20°C	No data available
Relative density	1.678
Density/specific gravity	No data available
Solubility	Soluble in water. Water: 710 g/l
Log Pow	No data available
Log Kow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Explosive limits	No data available

9.2 Other information

No additional information available.

SECTION 10.- STABILITY AND REACTIVITY
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10.1 Reactivity	No additional information available.
10.2 Chemical stability	Hygroscopic.
10.3 Possibility of hazardous reactions	Not established.
10.4 Conditions to avoid	Direct sunlight. Extremely high or low temperatures.
10.5 Incompatible materials	Strong bases.
10.6 Hazardous decomposition products	Sulfur compounds

SECTION 11.- TOXICOLOGICAL INFORMATION

11. 1. Information on toxicological effects

Likely routes of exposure	Not classified.
Acute toxicity	Not classified.

Name	LD ₅₀ oral	LD ₅₀ dermal	LC ₅₀ inhalation
Magnesium sulfate	-	-	-

Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	Not classified.



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Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target toxicity (single exposure)	Not classified.
Specific target toxicity (repeat exposure)	Not classified.
Aspiration hazard	Not classified.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Ecology - General	No additional information available.
Ecology - Air	No additional information available.
Ecology - Water	No additional information available.

12.2 Persistence, and degradability

Not established.

12.3 Bioaccumulative potential

Not established.

12.4 Mobility in soil

No additional information available.

12.5 Other adverse effects

Other information Avoid release to the environment.

SECTION 13.- DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste treatment methods	Dispose of in accordance with relevant local regulations.
Waste disposal recommendations	Dispose safely in accordance with local/national regulations. Additional information
information	Avoid release to the environment.

SECTION 14.- TRANSPORT INFORMATION

14.1. UN number	Not applicable. In accordance with DOT not regulated for transport.
14.2. UN proper shipping name	Not applicable.
14.3. Additional information	
Other information	No supplementary information available.
Overland transport	No additional information available.
Transport by sea	No additional information available.
Air transport	No additional information available.



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SECTION 15.- REGULATORY INFORMATION

15.1 US Federal regulations

Magnesium Sulfate, Heptahydrate (10034-99-8)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 International regulations

CANADA

Magnesium Sulfate, Heptahydrate (10034-99-8)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification

Uncontrolled product according to WHMIS classification criteria

EU-Regulations

Magnesium Sulfate, Heptahydrate (10034-99-8)

No additional information available.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

No additional information available.

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

No additional information available.

15.2.2. National regulations

Magnesium Sulfate, Heptahydrate (10034-99-8)

No additional information available.

15.3 US State regulations

No additional information is available.

SECTION 1 .- OTHER INFORMATIC

NFPA	NFPA health hazard	1	NFPA fire hazard	0	NFPA instability hazard	0	NFPA Special hazard	-
HMIS III	Health	1	Flammability	0	Physical	0	Personal Protection	E

E Safety glasses, gloves, and dust respirator.



Other information: None.

Made for: Quimica Pima, S.A. de C.V. Del Cobre No. 20 Parque Industrial. Hermosillo, Sonora, México. 83297.

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IMPORTANT NOTE: Information in this SDS is from available published sources and is believed to be accurate, but is not exhaustive and will be used only as a guide, which is based on current knowledge of the chemical substance or mixture and applied to the appropriate product for safety precautions. No warranty, express or implied, is made and Pima Chemicals & Fertilizers, LLC and Quimica Pima, S.A. de C.V. assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.

End of Safety Data Sheet