

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Magnesium Sulfate Heptahydrate
CAS number	10034-99-8
Synonyms	Magnesium Sulfate Crystals, Epsom Salts

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

Identified uses	Laboratory chemicals
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1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Based on available criteria, the classification criteria are not met.

2.2 GHS Label elements, including precautionary statements

Pictogram	Not applicable
Signal Word	None required

Hazard statements None required

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Magnesium Sulfate Heptahydrate	Magnesium Sulfate Crystals, Epsom Salts	10034-99-8	> 99%
Magnesium sulfate	-	7487-88-9	-

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice No information available

If inhaled Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

In case of skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if symptoms occur.

In case of eye contact Rinse immediately with plenty of water, especially under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

If swallowed Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

Unsuitable extinguishing media No information available

5.2 Specific hazards arising from the substance or mixture

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes

5.3 Special 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.

5.4 Further information

Hazardous combustion products: Sulfur oxides, Magnesium oxides.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation.

6.2 Environmental precautions

Avoid release to the environment. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal.

6.4 Reference to other sections

Not applicable

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin and eyes. Do not breathe dust.

Hygiene measures

No information available

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities

Strong bases

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

None under normal use conditions.

Personal protective equipment

Eye/face protection

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 protection

Wear appropriate protective gloves to prevent skin exposure

Body Protection

Wear appropriate protective clothes to prevent skin exposure.

Respiratory protection

No protective equipment needed under normal use conditions.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	White
Odor	Odorless
Odor Threshold	No information available
pH	5-8.2 5% aq. sol.
Melting Point/Range	1124°C
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	No information available
Flammability or explosive limit	No information available
Vapor Pressure	<0.1 mmHg @ 20°C
Vapor Density	No information available
Density	1.678
Solubility	No information available
Partition coefficient; n-octanol/water	No information available

Autoignition Temp	No information available
Decomposition Temp	> 150°C
Viscosity	No information available
Molecular Formula	Mg O4 S . 7 H2 O
Molecular Weight	246.48
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under normal processing conditions.

10.2 Chemical stability

Stable under normal conditions. Hygroscopic.

10.3 Possibility of hazardous reactions

None known, based on information available.

10.4 Conditions to avoid

Avoid dust formation. Excess heat. Exposure to moist air or water.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Sulfur oxides, Magnesium oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Oral LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg
Dermal LD50	Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg
Mist LD50	Based on ATE data, the classification criteria are not met. ATE > 5 mg/kg

Skin corrosion/irritation

No information available

Serious eye damage/eye irritation

No information available

Respiratory or skin sensitization

No information available

Germ cell mutagenicity

No information available

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Magnesium Sulfate Heptahydrate	10034-99-8	Not listed	Not listed	Not listed	Not listed	Not listed
Magnesium Sulfate	7487-88-9	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available

Chronic effects

No information available

11.2 Additional Information

The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

SECTION 12: Ecological information

12.1 Toxicity

Do not empty into drains.

12.2 Persistence and degradability

No information available

12.3 Bio accumulative potential

No information available

12.4 Mobility in soil

No information available

12.5 Results of PBT and vPvB assessment

No information available

12.6 Endocrine disrupting properties

No information available

12.7 Other adverse effects

Product		Species	Test Results
Magnesium Sulfate	EC50	Freshwater Algae	2700 mg/l - 72h
	LC50	Freshwater Fish	2610-3080 mg/l - 96 h 19000 mg/l - 24h
	EC50	Microtox (Photobacterium phosphoreum)	84000 mg/l - 30min
	EC50	Water Flea	1700 mg/l - 24h

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US) Not listed

IMDG Not listed

IATA Not listed

SECTION 15: Regulatory information

US federal regulations This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Magnesium Sulfate Heptahydrate: Not listed.

Magnesium Sulfate: Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not applicable.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Not applicable.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed

Food and Drug Administration (FDA)

Not regulated

US state regulations

US. Massachusetts RTK - Substance List

Not listed

US. New Jersey Worker and Community Right-to-Know Act

Not listed

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed

US. Rhode Island RTK

Not listed

California Proposition 65

Not listed

SECTION 16: Other information

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SECTION 17: Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.