

SAFETY DATA SHEET

Issue Date 17-February 2015
Revision Date 17-March 2020
Version 2

SECTION 1: Identification

Product identifier

Product Name Epsom Salt, Magnesium Sulfate

Other means of identification

Product Code Epsom Salt, Magnesium Sulfate, U.S.P., Technical, Magriculture@
Synonyms Magnesium Sulfate Heptahydrate, Epsom Salts

Recommended use of the chemical and restrictions on use

Recommended Use
1. USP grade: Bath soak.
2. Agricultural grade: For use in correcting magnesium deficiency in crops and for use in animal feed.
3. Technical grade: For industrial use.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Giles Chemical, a Division of Premier Magnesia, LLC, 75 Giles Place, Waynesville, NC 28786

Emergency telephone number

Company Phone Number 828-452-4784
24 Hour Emergency Phone Number Chemtrec 1-800-424-9300
Emergency Telephone Chemtrec 1-800-424-9300

SECTION 2: Hazard(s) Identification

Classification GHS: Not classified EC: Not classified

Label elements Not Applicable

Hazards Summary: Spillages may be slippery. Dust may cause mild eye irritation. Ingestion may cause abdominal cramps and diarrhea.

SECTION 3: Composition / Information on Ingredients

Synonyms Magnesium sulfate heptahydrate, Epsom salts

Chemical Name	CAS No.	Weight-%	Trade Secret
Magnesium sulfate	10034-99-8	100	

SECTION 4: First aid measures

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention if irritation persists.

Skin contact: If irritation develops, seek medical attention.

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.

Note to physicians Treat symptomatically.

5. Fire-fighting measures**Suitable extinguishing media**

This material is compatible with all extinguishing media and standard firefighting techniques.

Unsuitable extinguishing media None.

Specific hazards arising from the chemical

Oxides of sulfur may be generated during fire. Noncombustible

Protective equipment and precautions for firefighters

As in any fire, use self-contained breathing apparatus and suitable protective clothing.

SECTION 6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Personal precautions Wear goggles. If inhalation exposure potential is above local exposure limits, use appropriate respiratory protection for particulate, in accordance with prevailing regulatory requirements.

Environmental precautions

Environmental precautions Sinks and mixes with water. No adverse effects known.

Methods and material for containment 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.

SECTION 7. Handling and storage**Precautions for safe handling**

Advice on safe handling Avoid generating dust. Promptly clean up spills. Material

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers closed and protected from extremes of temperature and humidity during storage. Material is not affected by impact.

Incompatible materials Metal hydrides and other water reactive materials.

SECTION 8. Exposure controls / personal protection**Control parameters**

Exposure Guidelines ACGIH: Particulate not otherwise classified. TLV Inhalable: 10 mg/m³. TLV Respirable: 3 mg/m³. OSHA: PEL Total: 15mg/m³ Respirable: 5 mg/m³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation. Ensure eye washes and safety showers are available.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses or chemical goggles.

Skin and body protection Wear gloves if abrasion or irritation occurs.

Respiratory protection Avoid inhalation of dust. Use suitable respiratory protection in accordance with requirements of 29 CFR 1910. 134, based on the level of exposure incurred.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid	Odor	None
Appearance	Granular to fine granular	Odor threshold	No information available
Color	White or transparent		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Ph	Approx. 6-7 at 5% w/w in water	
Melting point/freezing point	Melting point> 1000C	
Boiling point / boiling range	Not applicable	
Flash point	Not applicable	
Evaporation rate	Not applicable	
Flammability (solid, gas)	Not applicable	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	Not applicable	
Vapor density	Not applicable	
Specific Gravity	1.76g/cm ³	
Water solubility	71g/100ml at 20° C 91g/100ml at 40° C	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	55-58 lb/ft ³

SECTION 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.

SECTION 11. Toxicological informationInformation on likely routes of exposure

Product Information	No data available
Inhalation	No data available.
Eye contact	Dust may be irritating to eyes
Skin Contact	No data available.
Ingestion	RTECS: Oral LD ₅₀ 428mg/kg in man; 351 mg/kg in woman

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	Not listed by IARC, NTP, or OSHA
Reproductive toxicity	No information available.
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Aspiration hazard	No information available.

SECTION 12. Ecological information

Ecotoxicity Not classified as PBT vPvB

Persistence and degradability

No information available.

Bioaccumulation

Material does not bioaccumulate.

Mobility

Sinks and mixes with water.

Other adverse effects

No information available

SECTION 13. Disposal considerationsWaste treatment methods

Disposal of wastes This product does not exhibit any characteristics of a hazardous waste. Follow all applicable federal, state and local regulations for safe disposal.

Contaminated packaging Do not reuse container.

SECTION 14. Transport informationDOT

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

SECTION 15. Regulatory informationInternational Inventories

TSCA Listed as magnesium sulfate

DSL/NDSL	Listed
EINECS/ELINCS	231-298-2
ENCS	Listed
IECSC	Listed
KECL	Listed
PICCS	Listed
AICS	Listed

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 No information

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. EPA Label Information

EPA Pesticide Registration Number Not Applicable

SECTION 16. Other information

<u>NFPA</u>	Health hazards 1	Flammability 0	Instability 0	Specific hazards
<u>HMIS</u>	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection X

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Disclaimer

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