



MSDS - Epsom Salt (Magnesium Sulfate)

Revised February 8, 2010

Section 1. Product Identification

Name(s): Epsom Salt Magnesium Sulfate, Agricultural Grade

Chemical Name(s): Magnesium Sulfate, Heptahydrate

Distributed by Pestell Minerals & Ingredients, New Hamburg, ON Canada

24 Hour Emergency Telephone (Canutec): 613-996-6666

Section 2. Composition/Information on Ingredients

CAS Registry Number: 10034-99-8* (Wt. 100%)

*Under the Toxic Substances Control Act (TSCA) hydrates are considered as mixtures of their anhydrous salt and water. Accordingly the CAS Numbers 7487-88-9 are used for purposes of TSCA.

Section 3. Hazards Identification

Emergency Overview: White or transparent crystalline odorless powder. Noncombustible. At very high temperatures magnesium oxide, sulfur dioxide and sulfur trioxide may be generated.

Eye Contact: No known adverse effects

Skin Contact: No known adverse effects

Inhalation: Causes nausea, vomiting, abdominal cramps and diarrhea

Ingestion: Causes nausea, vomiting, abdominal cramps and diarrhea

Chronic Hazards: No known chronic hazards. Not listed by NTP, IARC or OSHA as a carcinogen.

Physical Hazards: Spilled material can be slippery.

Section 3. Chemical and Physical Data

Appearance and Odor: Colorless transparent crystals. Odorless.

Specific Gravity (liquids only): 1.76 g/cm³, Bulk Density Approx. 1.05 g/cm³

Solubility in Water: 71 g/100 ml at 20°C, 91 g/100ml at 40°C

Solids Content: 100%

pH: Approximately 6-7

Section 4. First Aid Measures

Eye Contact: Not applicable

Skin Contact: Not applicable

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: If large quantities of this material is swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call physician immediately.

Section 5. Fire Fighting Measures

Flammable Limits: Not applicable

Fire Extinguishing Media: Compatible with all extinguishing media

Special Fire Fighting Procedures: Use positive pressure supplied air breathing apparatus, chemical goggles, body covering, protective clothing.

Hazardous Decomposition Products: At very high temperatures, magnesium oxide, sulfur dioxide and sulfur trioxide may be generated.

Section 6. Accidental Release Measures

Personal Protection: Wear chemical goggles

Environmental Hazards: Sinks and mixes with water. No adverse effects known. Not a listed toxic chemical under SARA Title III, 313 40 CFR Part 372. Not a CERCLA Hazardous Substance under 40 CFR Part 302.

Small Spill and Cleanup: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment.

Large Spill Cleanup: Keep unnecessary people away, isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate personal protective equipment (PPE).

CERCLA RQ: There is no CERCLA Reportable Quantity for this material.

Section 7. Handling and Storage

Handling: Avoid breathing dust. Promptly clean up spills

Storage: Keep containers closed. Protect from extremes of temperature and humidity during storage. Recommended storage conditions 68-110 deg. F. and 54-87% relative humidity.

Section 8. Exposure Controls/Personal Protection

Engineering Controls: Use with adequate ventilation. Safety shower and eyewash fountain should be within direct access.

Respiratory Protection: Use a NIOSH approved dust respirator where dust occurs. Observe OSHA regulations for respirator use (29 CFR 1910.134)

Skin Protection: Wear gloves if abrasion or irritation occurs

Eye Protection: Wear chemical goggles

Section 9. Physical and Chemical Properties

Appearance and Odor: White or transparent crystals. Odorless.

Specific Gravity (liquids only): 1.76 g/cm³, Bulk Density Approx. 1.05 g/mc³

Solubility in Water: 71 g/100 ml at 20°C, 91 g/100ml at 40°C

Solids Content: 100%

pH: Approximately 6-7

Section 10. Stability and Reactivity

Stability: This material is stable under all conditions of use and storage

Conditions to Avoid: None

Materials to Avoid: 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 Information

Acute Data: When tested for primary irritation potential, this material caused mild eye irritation.

RTECS reports Oral TDLo=428 mg/kg in man - 351 mg/kg in women.

Section 12. Ecological Information

Eco Toxicity: Data not available

Environmental Fate: This material is not persistent in aquatic systems and does not contribute to BOD. It does not bio-concentrate up the food chain.

Physical/Chemical: Sinks and mixes with water

Section 13. Disposal Considerations

Classification: Disposed material is not a RCRA hazardous waste.

Disposal Method: Dispose in accordance with local, state and federal regulations.

Section 14. Transport Information

DOT UN Status: This material is not regulated hazardous material for transportation

Section 15. Regulatory Information

CERCLA: No CERCLA Reportable Quantity has been established for this material.

TSCA: All ingredients of this material are listed on the TSCA inventory.

FDA: Magnesium sulfate is an FDA GRAS substance pursuant to 21 CFR 184.1443. Epsom salt, Agricultural grade is not a suitable grade of magnesium sulfate for pharmaceutical uses.

Disclaimer

This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Pestell Minerals & Ingredients makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your

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