

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION  
-----

MATERIAL NAME: Magnesium Sulfate Injection, USP; Magnesium Sulfate in  
5% Dextrose Injection, Magnesium Sulfate Solution  
List Number: 1754, 2168, 3758, 3759, 3760, 3761, 4075,  
4913, 4914, 4943, 6727, 6728, 6729, 6730, 9628

MANUFACTURER: Hospital Products Division  
Abbott Laboratories  
Abbott Park, Illinois 60064

EMERGENCY TELEPHONE NUMBER: 1-847-937-7970  
CHEMTREC TELEPHONE NUMBER: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS  
-----

INGREDIENT NAME: Magnesium Sulfate Heptahydrate \*  
CAS/RTECS NUMBERS: 10034-99-8 / OM4508000  
OSHA-PEL 8HR TWA: N/L  
STEL: N/L  
CEILING: N/L  
ACGIH-TLV 8HR TWA: N/L  
STEL: N/L  
CEILING: N/L  
OTHER 8HR TWA: N/A  
LIMITS STEL: N/A  
CEILING: N/A

\* Hazardous per OSHA criteria

3. HAZARDS INFORMATION  
-----

EMERGENCY OVERVIEW: In clinical use, this material is used as an  
anticonvulsant. Ingestion could result in a laxative effect. Target  
organs include the gastrointestinal tract (from ingestion), nervous  
system, cardiovascular system and heart.

ROUTE(S) OF ENTRY: Skin: Unlikely  
Inhalation: Unlikely

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
3. HAZARDS INFORMATION, continued  
-----

Ingestion: Unlikely

INGESTION RATING: None

SKIN ABSORPTION RATING: N/D

INHALATION RATING: N/D

CORROSIVENESS RATING: N/D

SKIN CONTACT RATING: N/D

SKIN SENSITIZATION RATING: N/D

EYE CONTACT RATING: N/D

TARGET ORGANS: Nervous system, cardiovascular system, heart,  
gastrointestinal tract

CARCINOGENICITY RATING: NTP: N/L IARC: N/L OSHA: N/L

ACGIH: N/L

None

SIGNS AND SYMPTOMS: N/D. Ingestion of magnesium sulfate has a laxative effect and can result in nausea, vomiting, abdominal pain, diarrhea and electrolyte loss. Systemically, magnesium sulfate can cause sedation, flushing, sweating, hypotension, hypothermia, reduced respiration rate, hypotonia, depressed reflexes, reduced heart rate, altered ECG and circulatory collapse. Administration to pregnant women prior to delivery can result in hypotension, hyporeflexia, hypotonia and respiratory depression in the neonate.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: N/D. Data suggest heart block, myocardial damage, magnesium intoxication, respiratory ailments, renal ailments and gastrointestinal ailments. Concurrent use of central nervous system depressants, neuromuscular blocking drugs and cardiac glycosides.

4. FIRST AID MEASURES

EYES: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Intravenous calcium gluconate can counteract the effects of hypermagnesemia. Provide symptomatic/supportive care, monitoring cardiovascular and respiratory function, as necessary.

SKIN: Remove from source of exposure. Flush with copious amounts of water. If irritation persists or signs of toxicity occur, seek medical attention. Intravenous calcium gluconate can counteract the effects of hypermagnesemia. Provide symptomatic/supportive care, monitoring cardiovascular and respiratory, as necessary.

INGESTION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Induce emesis or perform gastric lavage if patient is alert. Intravenous calcium gluconate can counteract the effects of hypermagnesemia. Provide symptomatic/supportive care, monitoring cardiovascular and respiratory function, as necessary.

INHALATION: Remove from source of exposure. If signs of toxicity occur, seek medical attention. Intravenous calcium gluconate can counteract the effects of hypermagnesemia. Provide symptomatic/supportive care, monitoring cardiovascular and respiratory function, as necessary.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: N/A

FLASH POINT METHOD: N/A

LOWER EXPLOSIVE LIMIT(%): N/D

UPPER EXPLOSIVE LIMIT(%): N/D

AUTOIGNITION TEMPERATURE: N/D

FIRE & EXPLOSION HAZARDS: N/D

EXTINGUISHING MEDIA: Use media appropriate for primary cause of fire.

FIRE FIGHTING INSTRUCTIONS: Fire fighters should wear self-contained breathing apparatus, flame and chemical resistant clothing, boots and gloves.

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
6. ACCIDENTAL RELEASE MEASURES  
-----

SPILL OR RELEASE PROCEDURES: Absorb with suitable material and place into container for disposal in accordance with Section 13.

7. HANDLING AND STORAGE  
-----

HANDLING: Avoid excessive heat. Protect from freezing.

STORAGE: Store at room temperature (25 degrees C).

SPECIAL PRECAUTIONS: Minimize exposure to heat. Protect from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION  
-----

ENGINEERING CONTROLS: No special provisions are required under normal product use.

RESPIRATORY PROTECTION: Respiratory protection is not needed during normal product use.

SKIN PROTECTION: If skin contact is likely, impervious gloves are recommended.

EYE PROTECTION: Eye protection is not required during typical product use conditions. Eye protection is recommended if contact is likely.

OTHER PROTECTION: N/D

9. PHYSICAL AND CHEMICAL PROPERTIES  
-----

APPEARANCE/PHYSICAL STATE: Clear solution.

ODOR: Odorless.

BOILING POINT: N/D

MELTING/FREEZING POINT: N/D

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (Air=1): N/D

EVAPORATION RATE: N/D

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
9. PHYSICAL AND CHEMICAL PROPERTIES, continued  
-----

BULK DENSITY: 1.017 - 1.024 g/mL  
SPECIFIC GRAVITY: N/D  
SOLUBILITY: Water.  
pH: 3.5 - 7.0  
VISCOSITY: 1.13 - 2.0 cps at 25 deg. C

10. STABILITY AND REACTIVITY  
-----

CHEMICAL STABILITY: N/D

INCOMPATIBILITIES: N/D

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it emits toxic fumes of SOx.

HAZARDOUS POLYMERIZATION: N/D

11. TOXICOLOGICAL INFORMATION  
-----ORAL TOXICITY: N/D. LDLo = 3000-5000 mg/kg in mice, rats and rabbits,  
TDLo = 428 mg/kg in humans for magnesium sulfate.

DERMAL TOXICITY: N/D

INHALATION TOXICITY: N/D

CORROSIVENESS: N/D

DERMAL IRRITATION: N/D

OCULAR IRRITATION: N/D

DERMAL SENSITIZATION: N/D

SPECIAL TARGET ORGAN EFFECTS: N/D. In clinical use, magnesium sulfate is used orally as a laxative and is given by injection to treat convulsions and magnesium deficiency. It acts to depress the nervous system and alters cardiac and cardiovascular function.

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
11. TOXICOLOGICAL INFORMATION, continued  
-----

CARCINOGENICITY INFORMATION: N/D

12. ECOLOGICAL INFORMATION  
-----

ECOLOGICAL INFORMATION: N/D

13. DISPOSAL CONSIDERATIONS  
-----

WASTE DISPOSAL METHODS: Dispose of in accordance with local, state and federal regulations.

14. TRANSPORTATION INFORMATION  
-----

DOT STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

IATA/ICAO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A

IMO STATUS: Not Regulated  
PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
UN NUMBER: N/A  
PACKING GROUP: N/A  
REPORTABLE QUANTITY: N/A  
FLASH POINT: N/A

Magnesium Sulfate Injection, USP

ISSUED 12/27/96

-----  
15. REGULATORY INFORMATION  
-----

TSCA STATUS: N/A

CERCLA STATUS: N/L

SARA STATUS: N/L

RCRA STATUS: N/L

PROP 65 (CA): N/D

16. OTHER INFORMATION  
-----

LEGEND: N/A = Not Applicable

N/D = Not Determined

N/L = Not Listed

L = Listed

C = Ceiling

S = Short-term

(R) = Registered Trademark of Abbott Laboratories

(TM) = Registered Trademark of Abbott Laboratories

The information and recommendations contained herein are based upon tests believed to be reliable. However, Abbott Laboratories does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform with actual conditions of usage may be required. Abbott Laboratories assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data. No freedom from infringement of any patent, copyright or trademark is to be inferred.

APPROVED BY: FM