



P. O. Box 370  
Waynesville, NC  
28786  
USA  
Tel 828 452 4784  
Fax 828 452 4786

**MATERIAL SAFETY DATA SHEET**  
**MAGNESIUM SULFATE**  
**HEPTAHYDRATE**  
**November 4, 2011**

**SECTION I.**

**Physical Address:** P.O. Box 370, (102 Commerce Street)  
Waynesville, NC 28786

**Chemical Name:** Magnesium Sulfate Heptahydrate

**Formula:**  $MgSO_4 \cdot 7H_2O$

**CAS No:** 10034-99-8\*

\*Under the Toxic Substance Control Act (TSCA), hydrates are considered as mixtures of their anhydrous salt and water. Accordingly, the CAS Number 7487-88-9, 7732-18-5 are used for purposes of TSCA.

**SECTION II.**

Hazardous Ingredients  
Material or Component: NONE  
Hazard Date: NONE

**SECTION III.**

Physical Data  
Boiling Point 760 MM HG: DOES NOT BOIL  
Specific Gravity (H<sub>2</sub>O.1): 1.68  
Vapor Density (Air.1): N/A  
% Volatiles by Volume: N/A  
Appearance & Odor: SMALL COLORLESS CRYSTALS,  
ODORLESS  
Melting Point: °C 70D – LOSES WATER  
Vapor Pressure: N/A  
Solubility in H<sub>2</sub>O by Weight: APPRECIABLE  
Evaporation Rate (Butyl Acetate): N/A

**SECTION IV.**

Fire & Explosion Data  
Flash Point (Test Method): NON-FLAMMABLE MATERIAL  
Autoignition Temperature: N/A  
Flammable Limits In Air, % by Volume: N/A  
Extinguishing Media: N/A  
Special Fire Fighting Procedures: PROPER BREATHING EQUIPMENT  
Unusual Fire & Explosion Hazard: EXTREMELY HIGH TEMPERATURES  
MAY PRODUCE SULFUR TRIOXIDE &  
SULFUR DIOXIDE

**SECTION V.**

Health Hazard Information  
Health Hazard Data: NO EXPOSURE LIMITS HAVE BEEN  
ESTABLISHED BY OSHA

Routes of Exposure:  
Inhalation: POSSIBLE DUST IRRITATION  
Skin Contact: NONE  
Skin Absorption: NONE  
Eye Contact: POSSIBLE DUST IRRITATION  
Ingestion: MAY CAUSE BOWEL MOVEMENT  
IF SWALLOWED, CONSULT PHYSICIAN

**NOTE TO PHYSICIAN:** Magnesium Sulfate/Heptahydrate (Epsom Salt), is an inorganic chemical having no properties which are deleterious to the skin of humans, internally or externally. For several hundred years it has been widely used as a cathartic and analgesic in aqueous solution. It is in the US Pharmacopia XXII as well as the Food Chemical Codex.

Effects of Overexposure:	
Acute Overexposure:	MAY CAUSE EXCESSIVE BOWEL MOVEMENT IF SWALLOWED, ABDOMINAL CRAMPS.
Chronic Overexposure:	IF OVER 10 GRAMS SWALLOWED, CONSULT PHYSICIAN
Emergency & First Aid Procedures	
Eyes:	WASH WITH WARM WATER (H2O)
Skin:	N/A
Inhalation:	LEAVE DUST AREA FOR FRESH AIR
Ingestion:	CONSULT PHYSICIAN. IF LARGE AMOUNTS ARE INGESTED, INDUCE -- VOMITING.

**SECTION VI.**

Reactivity Data	
Conditions Contributing to Instability:	STABLE
Incompatibility:	NONE
Hazardous:	EXTREMELY HIGH TEMPERATURES, MAY PRODUCE SULFUR TRIOXIDE & SULFUR DIOXIDE.
Conditions Contributing to Hazardous Polymerization:	WILL NOT OCCUR

**SECTION VII.**

Spill or Leak Procedures – Not A RCRA Hazardous Waste	
Steps to be Taken if Material is Spilled Released:	NO SPECIAL PRECAUTIONS NECESSARY
Waste Disposal Method:	DILUTE WITH WATER (H <sub>2</sub> O) OR SWEEP & DISPOSE OF PROPERLY.

**SECTION VIII.**

Special Protection Information	
Ventilation Requirements:	APPROPRIATE DUST CONTROL EQUIPMENT REQUIRED
Specific Personal Protection Equip.:	FOR OPERATORS, RESPIRATOR COULD BE WORN IN ABNORMAL DUST CONDITIONS
Respiratory (specify in detail)	
Eye:	NORMAL EYE PROTECTION FOR DUST
Gloves:	NONE
Other Clothing & Equipment:	NONE

**SECTION IX.**

Special Precautions	
Precautionary Statements:	NONE
Other Handling & Storage Requirements:	NONE

***PRODUCERS OF MAGNESIUM SULFATE SINCE 1950***