



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

**SPECIFICATIONS FOR  
MAGNESIUM SULFATE CRYSTALS,  
USP  
July 24, 2014**

**CHARACTERISTICS:**

The material shall be colorless, solid at ambient temperatures, formed in small needle-like rhombic crystals and free of solid or fibrous foreign matter that will require the dissolved material to be filtered before being used.

**PROPERTIES:**

**CHEMICAL  
Identification**

Test of Magnesium .....Positive  
Test of Sulfate .....Positive  
Consistently Free of Volatile Organic Impurities

pH. ....5.0 – 9.2  
Loss of ignition .....40.0% - 52.0%  
Chloride .....014% maximum  
Arsenic .....0003% maximum  
Heavy Metals .....001% maximum  
Iron .....002% maximum  
Selenium .....003% maximum  
Assay .....99.0% - 100.5%

**PHYSICAL**

Color .....Colorless  
Crystal Form .....Rhombic (monoclinic)  
Density, Bulk (approximate) lb/ft3 .....55-58

**QUALITY ASSURANCE PROVISION:**

**GENERAL**

The material specified herein shall be manufactured using acceptable industrial practices.

The material shall be guaranteed to meet chemical and physical properties specified herein.

**RESPONSIBILITIES FOR TESTS & INSPECTIONS**

Unless otherwise specified by purchaser, the supplier is responsible for providing a lot analysis on the Material. Except as otherwise specified, the supplier may utilize his own facilities or any commercial Laboratory. Analysis' are available for each lot at an additional charge.

**PACKAGING & SHIPPING**

**PACKAGING**

Shall be accomplished in accordance with acceptable commercial practices for domestic or foreign shipments unless otherwise indicated by the purchaser. It shall be the vendor's responsibility to determine that packaging, as done, is adequate to assure that all materials shall arrive at destination in an uncontaminated condition and ready for intended use.

**SHIPPING**

Shall be accomplished in accordance with acceptable commercial practices for domestic or foreign shipment For this type of product unless otherwise indicated by the purchaser.

**DISCUSSION**

**CHARACTERISTICS**

Epsom salt is one of the most common forms of magnesium sulfate. EPSOM SALT is a hydrated salt with seven molecules of water, so caking or bridging can occur. Care should be taken to protect the material if it is stored in the granular form for long periods of time. EPSOM SALT is readily soluble in water.

**PRODUCERS OF MAGNESIUM SULFATE SINCE 1950**