



**Giles Chemical, a division of Premier Magnesia, LLC. Repackaging Facility**

**102 Commerce Street Waynesville, NC 28786**

**Phone: 828-452-4784 Fax: 828-452-4786**

**Tech Certificate of Analysis**

CUSTOMER: \_\_\_\_\_

CUST. REF: \_\_\_\_\_

SHIP DATE: \_\_\_\_\_

PRODUCT: Magnesium Sulfate - Tech

TRAILER NUMBER: \_\_\_\_\_

BATCH NUMBER: **2013**

BILL OF LADING #: \_\_\_\_\_

LOT NUMBER: \_\_\_\_\_

PO NUMBER #: \_\_\_\_\_

SHIPPER: \_\_\_\_\_

MANUFACTURED: \_\_\_\_\_

CUST. SERV.: \_\_\_\_\_

EXPIRATION: \_\_\_\_\_

I certify that this material meets all the requirements of the Giles Chemical sales specifications. Periodic testing has shown samples to be consistently free of volatile organic impurities. Giles Chemical magnesium sulfate is manufactured under the guidelines of Current Good Manufacturing Practices (cGMP). Other ingredients contained here in at concentrations  $\leq 1\%$  are not included in this analysis.

**EPSOM SALT, Magnesium Sulfate - Heptahydrate, Tech Grade**

METHOD	TEST	LOWER	UPPER	Test Results
VISUAL	Appearance	~~	~~	Clear
L12-PR-100-004	Chloride as Cl (%)	~~	0.014	< 0.014%
L12-PR-100-006	Heavy Metals As Pb (%)	~~	0.001	< 0.001%
L12-PR-100-003	Ignition Loss (%)	40.00	52.00	51.61%
L12-PR-100-005	Iron (ppm)	~~	20.00	< 20.00 ppm
L12-PR-100-008	MgSO <sub>4</sub> ( Anhydrous wt. % )	99.00	100.50	100.38%
L12-PR-100-003	MgSO <sub>4</sub> ( As is basis, % )	48.30	52.00	48.99%
L12-PR-100-002	pH 5% Solution	5.00	9.20	7.80

CONTACT:

ANALYST:

Quality Assurance Laboratory

SIGNATURE ON FILE

Bryan Elchert - Chemist

828-452-4784 ext.31