



**Giles Chemical, a division of Premier Chemicals, LLC.**  
**102 Commerce Street Waynesville, NC 28786**  
**Tech Certificate of Analysis**

1/19/2011

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

CUST. REF: \_\_\_\_\_ SHIP DATE: \_\_\_\_\_

PRODUCT: Magnesium Sulfate - Tech TRAILER NUMBER: \_\_\_\_\_

SHELF LIFE: 3 Years BILL OF LADING # : \_\_\_\_\_

LOT NUMBER: **0111** PO NUMBER # : \_\_\_\_\_

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

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

I, certify that this material meets all the requirements of the Giles Chemical sales specification and the United States Pharmacopeia 33. Periodic testing has shown the samples to be consistently free of volatile organic impurities. Giles Chemical manufactured under the guidelines of Good Manufacturing Practices ( GMP )

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

METHOD	TEST	LOWER	UPPER	Test Results
VISUAL	Appearance	~~	~~	Clear
USP33	Chloride as Cl (%)	~~	0.014	.002%
USP33	Ignition Loss (%)	40.00	52.00	51.94%
USP33	MgSO <sub>4</sub> ( Anhydrous wt. % )	99.00	100.50	99.46%
USP33	MgSO <sub>4</sub> ( As is basis, % )	48.30	52.00	48.54%
USP33	pH 5% Solution	5.00	9.20	6.67
USP33	Mg <sup>2+</sup> ID			Present
USP33	SO <sub>4</sub> <sup>2-</sup> ID			Present

ATTN:

ANALYST:

SIGNATURE ON FILE