

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

	3/11/2011		
CUSTOMER:			
CUST. REF:		SHIP DATE:	
PRODUCT:	Magnesium Sulfate - Tech	TRAILER NUMBER:	
SHELF LIFE:	3 Years	BILL OF LADING #:	
LOT NUMBER:	0311	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 impuriities. Giles Chemical manufactured under the guidlines of Good Manufacturing Practices (GMP)

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

METHOD	TEST	LOWER	UPPER	Test Results
VISUAL	Appearance	~~	~~	Clear
USP33	Chloride as CI (%)	~~	0.014	0.002%
USP33	ignition Loss (%)	40.00	52.00	51.40%
USP33	MgSO <sub>4</sub> ( Anhydrous wt. % )	99.00	100.50	99.40%
USP33	MgSO <sub>4</sub> ( As is basis, % )	48.30	52.00	48.51%
USP33	pH 5% Solution	5.00	9.20	7.17
USP33	Mg <sup>2+</sup> ID			Present
USP33	SO <sub>4</sub> <sup>2-</sup> ID			Present

ATTN: ANALYST:

SIGNATURE ON FILE