



Giles Chemical, a division of Premier Chemicals, LLC.

102 Commerce Street Waynesville, NC 28786

USP Certificate of Analysis

9/5/2008

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

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

PRODUCT: **Magnesium Sulfate - USP** TRAILER NUMBER: \_\_\_\_\_

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

LOT NUMBER: **0908** PO NUMBER #: \_\_\_\_\_

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

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

I, certify that this material meets all the requirements of the Giles Chemical sales specification and the United States Pharmacopeia 30. 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, USP**

METHOD	TEST	LOWER	UPPER	Test Results
VISUAL	Appearance	~~	~~	Clear
USP30	Arsenic ( PPM )	~~	3.00	< 3 ppm
USP30	Chloride as Cl ( % )	~~	0.014	<.001%
USP30	Heavy Metals As Pb ( % )	~~	0.001	<.001%
USP30	ignition Loss ( % )	40.00	52.00	49.08%
USP30	Iron	~~	20.00	.20 ppm
USP30	MgSO <sub>4</sub> ( Anhydrous wt. % )	99.00	100.50	99.63%
USP30	MgSO <sub>4</sub> ( As is basis, % )	48.30	52.00	48.62%
USP30	pH 5% Solution	5.00	9.20	6.80
USP30	Selenium ( % )	~~	0.003	< .003%
USP30	Mg <sup>2+</sup> ID			Present
USP30	SO <sub>4</sub> <sup>2-</sup> ID			Present

ATTN:

ANALYST:

SIGNATURE ON FILE