



Giles Chemical Corporation USP Certificate of Analysis

1/15/2007

CUSTOMER: _____	SHIP DATE: _____
CUST. REF: _____	TRAILER NUMBER: _____
PRODUCT: Magnesium Sulfate - USP	BILL OF LADING #: _____
SHELF LIFE: 3 Years	PO NUMBER #: _____
LOT NUMBER: 0107	MANUFACTURED: _____
SHIPPER: _____	EXPIRES: _____
CUST. SERV.: _____	

I, certify that this material meets all the requirements of the Giles Chemical Corporation sales specification and the United States Pharmacopeia 29. Periodic testing has shown the samples to be consistently free of volatile organic impurities. Giles Chemical corporation manufactured under the guidelines of Good Manufacturing Practices (GMP)

EPSOM SALT, Magnesium Sulfate - Heptahydrate, USP

METHOD	TEST	LOWER	UPPER	Test Results
VISUAL	Appearance	~~	~~	Clear
USP24	Arsenic (PPM)	~~	3.00	< 3 ppm
ESAP	Boron (PPM)	~~	15.00	< 15.0 ppm
USP29	Chloride as Cl (%)	~~	0.014	.001%
USP29	Heavy Metals As Pb (%)	~~	0.001	<.001%
USP29	Ignition Loss (%)	40.00	52.00	51.32%
USP29	Iron	~~	20.00	.56 ppm
USP29	MgSO ₄ (Anhydrous wt. %)	99.00	100.50	99.65%
USP29	MgSO ₄ (As is basis, %)	48.30	52.00	48.63%
USP29	pH 5% Solution	5.00	9.20	7.10
USP29	Selenium (%)	~~	0.003	< .003%
USP29	Mg ²⁺ ID			Present
USP29	SO ₄ ²⁻ ID			Present

ATTN: _____

ANALYST: _____

SIGNATURE ON FILE