



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

4/24/2009

CUSTOMER: _____
CUST. REF: _____ SHIP DATE: _____
PRODUCT: Magnesium Sulfate - Tech TRAILER NUMBER: _____
SHELF LIFE: 3 Years BILL OF LADING # : _____
LOT NUMBER: 0609 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 31. 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
USP31	Chloride as Cl (%)	~~	0.014	<.001%
USP31	Ignition Loss (%)	40.00	52.00	51.46%
USP31	MgSO ₄ (Anhydrous wt. %)	99.00	100.50	99.83%
USP31	MgSO ₄ (As is basis, %)	48.30	52.00	48.72%
USP31	pH 5% Solution	5.00	9.20	6.17
USP31	Mg ²⁺ ID			Present
USP31	SO ₄ ²⁻ ID			Present

ATTN:

ANALYST:

SIGNATURE ON FILE