



## USP - CERTIFICATE OF ANALYSIS

9/15/2006

CUSTOMER: _____	SHIP DATE: _____
CUST. REF: _____	TRAILER NUMBER: _____
PRODUCT: <u>Magnesium Sulfate - USP</u>	BILL OF LADING #: _____
SHELF LIFE: <u>3 Years</u>	PO NUMBER #: _____
LOT NUMBER: <u>1206</u>	MANUFACTURED: _____
SHIPPER: _____	EXPIRES: _____
CUST. SERV.: _____	

USP29

I, certify that this material meets all the requirements of the PQ Corporation sales specification 600546 and the United States Pharmacopeia 29. All organic volatile impurities listed in General Chapter 467, USP 25 NF 20 are below the USP limits.

USP29

USP29	TEST	LOWER	UPPER	Test Results
USP29	Appearance	~~	~~	Clear
USP29	Arsenic ( PPM )	~~	3.00	<3ppm
USP29	Boron ( PPM )	~~	15.00	<15.0ppm
USP29	Chloride as Cl (%)	~~	0.014	.001%
USP29	Heavy Metals As Pb (%)	~~	0.001	< 0.001%
USP29	ignition Loss (%)	40.00	52.00	51.20%
USP29	Iron	~~	20.00	.16ppm
USP29	MgSO <sub>4</sub> ( Anhydrous wt. % )	99.00	100.50	99.49%
USP29	MgSO <sub>4</sub> ( As is basis, % )	48.30	52.00	48.62%
USP29	pH 5% Solution	5.00	9.20	6.20
USP29	Selenium ( % )	~~	0.003	< 0.003%
USP29	Mg <sup>2+</sup> ID			Present
USP29	SO <sub>4</sub> <sup>2-</sup> ID			Present

ATTN:

ANALYST:

SIGNATURE ON FILE

PQ - CORPORATION - UTICA, IL

(815) 667-4241