

TECH - CERTIFICATE OF ANALYSIS

| | 11/9/2010 | | |
|---------------|--------------------------|-------------------|---|
| CUSTOMER: | | | |
| CUST. REF: | | SHIP DATE: | _ |
| PRODUCT: | Magnesium Sulfate - TECH | TRAILER NUMBER: | |
| SHELF LIFE: | 3 Years | BILL OF LADING #: | |
| LOT NUMBER: | 1110 | PO NUMBER # : | |
| SHIPPER : | | MANUFACTURED : | |
| CUST. SERV. : | | | |
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I, certify that this material meets all the requirements of the PQ Corporation sales specification 606311

Magnesium Sulfate - Heptahydrate, Agricultural Grade; CAS Registry #: 10034-99-8

| METHOD | TEST | LOWER | UPPER | Test Results |
|--------|--|-------|--------|--------------|
| VISUAL | Appearance | ~~ | ~~ | Clear |
| USP33 | Chloride as CI (%) | ~~ | 0.014 | .002% |
| USP33 | ignition Loss (%) | 40.00 | 52.00 | 51.26% |
| USP33 | MgSO ₄ (Anhydrous wt. %) | 99.00 | 100.50 | 99.49% |
| USP33 | MgSO ₄ (As is basis, %) | 48.30 | 52.00 | 48.55% |
| USP33 | pH 5% Solution | 5.00 | 9.20 | 6.05 |
| | , p. 2 0 / 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 2.00 | 7.20 | |

ATTN: ANALYST:

SIGNATURE ON FILE

PQ - CORPORATION - UTICA, IL

(815) 667-4241