

Certificate of Analysis

Commodity Name: MANGANESE SULPHATE MONOHYDRATE

Invoice No.: 151201-PE-3828

Date: Dec 10, 2015

Batch No.: 201511

Batch Size: 27 MTS

Manufacturing Date: 2015/11

Expiry Date: 2016/11

| INDEX | STANDARD | TEST RESULT |
|--------------------|--------------|-------------|
| Manganese sulphate | 98% Min. | 98.30% |
| Mn | 31.8% Min. | 31.90% |
| Fe | 0.001% Max. | 0.0025% |
| Cl | 0.005% Max. | 0.002% |
| Pb | 0.001% Max. | 0.0006% |
| Water insoluble | 0.05% Max. | 0.045% |
| As | 0.0005% Max. | 0.0001% |