AMP Manganese 27 is a high-analysis, water-soluble, uniformly granulated manganese fertilizer, specifically designed to assist in plant growth, and maximizing yield.

**GUARANTEED ANALYSIS**

- Manganese: 27.0%
- Sulfur: 6.0%
- Water Soluble Mn: 40.0%
- Uniformity Index: 260
- Color: Dark Gray
- Bulk Density: 75lbs/ft³

**MANGANESE FUNCTIONS IN PLANT**

- Essential for chlorophyll formation
- Can accelerate germination and maturity
- Has a key role in nitrogen assimilation/reduction
- Primarily responsible for enzyme activation
- Essential in protein synthesis
- Can increase availability of phosphates and calcium

**MANGANESE CAN BE DEFICIENT IN**

- High organic matter soils, compacted soils
- Sandy textured soils
- High soil pH
- Excessive phosphorus, calcium, zinc, copper or iron levels

**SYMPTOMS**

- Low mobility, newer leaves can be affected first
- Intervernal chlorosis on broadleaf crops
- Leaves and leaf tips show gray to white specks
- Stunted, wilted leaves on grasses
Use AMP Manganese 27 for fall and pre-plant manganese deficiency prevention. AMP Manganese 27 is the product of choice for broadcast and band applications in a wide range of conditions.

**MANGANESE 27**

- **Water-soluble manganese at 40%**. Manganese 27 exceeds industry water-solubility standards.
- **Crop essential sulfur at 6%**. All the sulfur in Manganese 27 is in the immediately available form of sulfate sulfur.

### Comparison

<table>
<thead>
<tr>
<th>Product</th>
<th>Analysis</th>
<th>Product Rate Per Acre</th>
<th>Actual Nutrient per Acre</th>
<th>Water-Solubility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manganese 27</td>
<td>27.0% Mn</td>
<td>19#</td>
<td>5#</td>
<td>&gt;40.0%</td>
</tr>
<tr>
<td>Other</td>
<td>40.0% Mn</td>
<td>13#</td>
<td>5#</td>
<td>&lt;5.0%</td>
</tr>
</tbody>
</table>

### CRITICAL LEVELS IN PLANT AND SOIL TESTS

**Plant Tissue: parts per million (ppm)**

**Critical levels at about 15-150 ppm**

- Corn: 20-150 ppm
- Beans: 20-150 ppm
- Wheat: 30-150 ppm

**Soil test: parts per million (ppm), 0-6”, Mehlich III Extraction**

- Deficient: <1.0 ppm
- Marginal: 1.0-4.0 ppm
- Sufficient: >4.0 ppm

Advanced Micronutrient Products are treated with a superior dust coating and are uniform in size for excellent blending properties. We combine the agronomic water-solubility of sulfates with the economics of oxide materials. Advanced Micronutrient Products uses the latest technology in product manufacture. Bags are color coded for easy identification. Available in bulk, one-ton super sacks or 50# bags. Bagged product comes on non-returnable pallets with protective cardboard inserts and shrink-wrap. All AMP micronutrients have been environmentally screened for safe use.