



# Manganese 40

## Granular Manganese 40%

*Agrium  
Advanced  
Technologies  
(AAT)  
Manganese 40  
is a  
high-analysis,  
medium  
water-soluble,  
uniformly  
granulated  
manganese  
fertilizer,  
specifically  
designed to  
assist in  
plant growth,  
and  
maximizing  
yield.*

### **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
- Sandier textured soils
- High soil pH
- Excessive phosphorus, calcium, zinc, copper or iron levels

### **Symptoms**

- Low mobility, newer leaves can be affected first
- Interveinal chlorosis on broadleaf crops
- Leaves and leaf tips show gray to white specks
- Stunted, wilted leaves on grasses

### **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:	1.0-2.0 ppm
Sufficient:	>2.0 ppm





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### Guaranteed Analysis Ultra Yield Manganese 40

Manganese	40.0%
Nitrogen	1.0%
Sulfur	6.0%
Water Soluble Mn	30.0%
SGN	245
Uniformity Index	50.0%
Color:	Dark Gray

AAT Ultra Yield 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. Agrium 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 Ultra Yield micronutrients have been environmentally screened for safe use.

Use **Ultra Yield Manganese 40** for fall and pre-plant manganese deficiency prevention. **Ultra Yield Manganese 40** is the product of choice for broadcast and band applications in a wide range of conditions.

- Water-soluble manganese at 30%. **Manganese 40** delivers more water-solubility than other high-analysis manganese fertilizers.
- Crop essential sulfur at 6%. All the sulfur in **Manganese 40** is in the immediately available form of sulfate sulfur.
- Nitrogen content of 1% provides added dollar value to **Manganese 40** and it is in the ammonium form, which means it won't volatilize.
- **Manganese 40** offers a lower cost per unit fertilizer versus Agrium **Ultra Yield BroadMan 20** and Agrium **Ultra Yield Manganese 27**. Logistical concerns of freight, warehouse space, and volume of product needed are addressed with this high-analysis fertilizer.

### Comparison

Product	Analysis	Product Rate per Acre	Actual Nutrient per Acre			Water-Solubility
			Manganese	Sulfur	Nitrogen	
<b>Manganese 40</b>	40.0% Mn	13#	5.0#	0.8#	0.1#	>40.0%
Other	40.0% Mn	13#	5.0#	0.8#	0.0#	<5.0%

**For more information on Manganese 40 please contact:**

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