

# Copper 12

## Granular Copper 12%



Advanced Micronutrient Products

AMP Copper 12 is a low-analysis, highly water-soluble, uniformly granulated copper fertilizer, specifically designed to assist in plant growth and maximizing yield.

### GUARANTEED ANALYSIS

Copper .....	12.0%
Zinc .....	6.0%
Sulfur .....	13.0%
Water Soluble Cu .....	65.0%
SGN .....	.260
Uniformity Index.....	50%
Color .....	Dark Gray/Brown
Bulk Density.....	75lbs./ft <sup>3</sup>

### COPPER FUNCTIONS IN PLANT

- Essential for chlorophyll production
- Promotes seed production
- Has a key role in nitrogen metabolism/calcium translocation
- Required for regulation of growth and enzyme systems
- Essential in protein synthesis
- Catalyzes several other plant reactions

### COPPER CAN BE DEFICIENT IN

- High organic matter soils
- Sandier textured soils
- High soil pH
- Excessive phosphorus, zinc, manganese or iron levels

### SYMPTOMS

- Low mobility, newer buds or leaves affected
- Malformed, discolored, poorly filled heads
- Seed set and grain production reduced, plant stunted
- Increased incidence of ergot, root rot, rusts, etc.
- Stem melanosis or darkening
- Wilting



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Use AMP Copper 12 for fall and pre-plant copper deficiency prevention. AMP Copper 12 is the product of choice for broadcast and band applications in a wide range of conditions.

### COPPER 12

- Highly water-soluble copper at 65%. Copper 12 exceeds industry water-solubility standards. Copper 12 contains 6% zinc in a highly water-soluble form.
- Crop essential sulfur at 13%. All the sulfur in Copper 12 is in the immediately available form of sulfate sulfur.
- Copper 12 delivers 40% more granules per acre as compared to a 20% copper product. Basis 2# of actual copper per acre, Copper 12 delivers nearly 380,000 granules per acre versus 230,000 from a 20% copper source. More granules per acre results in more feeding sites, which provides for better nutrient uptake.

### Comparison

Product	Analysis	Product Rate Per Acre	Actual Nutrient per Acre			Granules Per Acre
			Copper	Sulfur	Zinc	
Copper 12	12.0% Cu	17#	2.0#	2.2#	1.0#	>380K
Other	20.0% Cu	10#	2.0#	1.2#	1.0#	<230K

### CRITICAL LEVELS IN PLANT AND SOIL TESTS

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

- Critical levels at about 4-25 ppm
- Corn: 5-20 ppm
- Soybeans: 6-15 ppm
- Wheat: 5-25 ppm

#### Soil Test: parts per million (ppm), 0-6", Mehlich III extraction

- Deficient: <0.6 ppm
- Marginal: 0.6-1.0 ppm
- Sufficient: >1.0 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.

