

# Mg12



## MAGNESIUM-RICH SOLUTION FOR ENHANCED CROP GROWTH AND RESILIENCE

MNG Mg12 is a specialized foliar solution, carefully designed to address the unique nutritional needs of magnesium-sensitive crops such as potatoes, corn, vegetables, soybeans, and rapeseed. With its high concentration of magnesium and essential organic compounds, this formulation promotes sustainable agricultural practices by enhancing the natural nutrient cycles and ensuring optimal plant development.

Crafted to integrate seamlessly into modern farming systems, this solution focuses on improving the overall vitality of crops, ensuring efficient nutrient utilization and resilience to changing environmental conditions. By supporting the natural metabolic processes of plants, it contributes to consistent crop quality and long-term agricultural productivity.

### Enhanced Growth and Yield

High magnesium content supports robust plant growth and higher yields, promoting stronger, healthier crops.

### Improved Resistance to Environmental Stress

The combination of calcium and silicon strengthens cell walls, enhancing natural resistance to drought, frost, and fungal diseases.

### Optimized Enzyme Activation and Photosynthesis

Boosts photosynthesis and enzyme production, leading to improved energy flow and stress tolerance. This results in larger chloroplasts and higher protein synthesis, enhancing resilience.

### Efficient Water Use and Stomata Function

Enhanced stomatal function promotes better water management, reducing excessive evaporation and aiding water conservation.

### Improved Taste and Quality of Produce

Higher levels of vitamins, sugars, flavonoids, and starch contribute to superior flavor and quality in harvested products.

### Enhanced Storage and Transport Capabilities

Optimizes the potassium/calcium ratio, which helps extend shelf life and storability, particularly in potatoes and vegetables.

### Increased Oil Accumulation for Oilseed Crops

Encourages oil accumulation in oilseed crops like rapeseed and soybeans, supporting improved product value.

### Root and Plant Growth Promotion

Formulated to promote stronger root systems and balanced plant development.

### Enhanced Nutrient Exchange Capacity

Boosts the exchange of essential cationic nutrients, improving mineral uptake and utilization.



## COMPOSITION

Element	
Magnesium (MgO)	12.4%
Silicon (SiO <sub>2</sub> )	646.0%
Iron (Fe <sub>2</sub> O <sub>3</sub> )	2.2%
Calcium (CaO)	35.0%
Humic Acid	2.50%
Fulvic Acid	2.50%
Trace Elements	
Manganese (Mn)	301 ppm
Zinc (Zn)	57 ppm
Boron (B)	9 ppm
Selenium (Se)	7 ppm
Copper (Cu)	6 ppm
Molybdenum (Mo)	3 ppm
Chloride (Cl)	Less than 0.5%
Sodium (Na <sub>2</sub> O)	Less than 0.5%



## ADVANCED TECHNOLOGY

Our unique processing creates positively charged microfine particles that ensure:

- Superior leaf penetration
- Enhanced nutrient mobility
- Optimal cellular absorption
- Balanced mineral distribution

## QUALITY ASSURANCE

- Swiss-developed formula
- 100% natural ingredients
- 10-year shelf life
- Professional technical support

## EASY APPLICATION

- Simple foliar application 2–3 times per season
- Concentration: 0.2%–0.6% (crop-dependent)
- Compatible with most pesticides and fertilizers
- Best applied in early morning hours

## PHYSICAL/CHEMICAL SPECIFICATIONS

Particle size	3,0 µm
pH	9,0–9,5
Colour	Red
Spec. weight	0,8 kg/L
Appearance	Powder

## JAM-TECH ACTIVATION AND MICRONIZATION TECHNOLOGY

Our unique JAM-Tech technology revolutionizes the way plants receive nutrients, ensuring maximum efficiency and improved growth. By reducing mineral particles to just 3 µm through intense physical collisions, we enhance their reactivity, enabling faster nutrient release and better absorption through plant stomata. This leads to stronger, healthier crops, higher yields, and superior quality harvests. With the high Zeta potential of the minerals, nutrients are evenly distributed across the plant, ensuring optimal performance even with lower application rates. Particularly effective for calcium, magnesium, and trace elements, JAM-Tech ensures maximum nutrient efficiency.

Designed with sustainability in mind, our products are produced with near-zero emissions, offering both agronomic and economic benefits, all while being kind to the environment.

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