

MICRONA[™] AG H₂O Solution Grade—High quality Calcium — it pays!

MICRONA AG H₂O Solution Grade

is an ultra-fine, white, natural limestone powder with proven advantages far above standard Ag-lime. MICRONA is used in direct soil and irrigation applications for specialty crops such as grapes, high quality row crop, cane berry, nursery stock, and other valuable crops. Use of MICRONA results in fast soil pH change. MICRONA can be used as a light-reflective agent, however it is not suitable for sunburn protection.

MICRONA's High Dissolution Rate explains the lightning quick response for pH adjustments and high calcium nutrient availability. Effective at drastically reduced application rates, MICRONA can help growers lower input cost and time.

- **Higher Dissolution Rates**
- Quicker Reactivity
- **Proven Effectiveness**
- Fast Uptake
- Increased Calcium Availability

In conjunction with European Ag-Lime standards, a variety of U.S. limestone materials have been tested in Columbia River Carbonates' research laboratories evaluating dissolution and reactivity rates. [Table 1]

Tests show that different Aq-lime materials vary greatly in terms of reactivity and soil neutralization. [Reference 1] confirming years of prior independent research. [Reference 2]

MICRONA's Superior Acid Neutralization

of dissolution of calcium carbonate. While particle size has a significant influence (and MICRONA is ultra-fine) we found that variations in reaction times exist regardless of particle size. As soil acids come into contact with the surface of Ag-lime particles, the calcium carbonate converts to calcium ions, water and carbon dioxide. MICRONA's high quality, fine calcium carbonate neutralizes soil acids very efficiently.

MICRONA Saves Cost

Time and distance are formidable enemies for any crop producer. Liming, like any crop fertility program, can be costly. Using target nutrient applications during the crop's major growing periods, placement of material as close to the plant as possible, and utilizing high quality lime maximize efficiency, effectiveness and affordability.

MICRONA works better because smaller particles have a higher surface to volume ratio thereby enhancing reactions. Contrary to common belief, this ultra-fine calcium material does not easily wash out, but is retained in the top layers of soil. The result; less lime is required to both gain desired pH levels and increase soil calcium levels.

With MICRONA you can use far less product than is traditionally recommended for liming, resulting in lower labor and transportation costs.

MICRONA Crop Fertility Management

MICRONA high quality lime not only acts faster, it also helps support proper soil structure and porosity which enhances plant respiration. With an extremely small particle size, it supports natural biological life in the soil which more effectively releases needed minerals to the plant-particularly in heavy clay and high organic soils. It has long been known that most soil microbes are sensitive to acid soils. Microbial biomass carbon in limed soil is significantly greater than in non-limed soils. Research done by soil microbiologists shows that fine The rate of acid neutralization strongly depends on the rate agricultural lime has the largest positive impact on earthworms and microbes as compared to coarser lime or dolomite. [Reference 3]

> MICRONA AG H₂O – its high neutralizing value, ultra-fineness, and solubility makes it the most effective liming material available in its class.

Add MICRONA to your fertility program today.