

MICRONA™ Agricultural Lime

Reactive, Effective, Efficient

Micronized Material for Maximum Return

MICRONA™ Agricultural Lime is made from the highest quality, micronized calcium carbonate limestone. It corrects low soil pH, prevents solubility of aluminum and other metals, stimulates microorganisms, maximizes fertilizer effectiveness, releases nutrients and improves soil structure. Use in field applications and compost blending for fast pH increase.

- **Quick Reactivity**
- **High Dissolution Rates**
- **Fast Uptake**
- **Increased Calcium Availability**
- **Proven Effectiveness**
- **An approved material under WSDA organic food program**

Quick Reacting Lime

MICRONA has a high dissolution rate which explains its lightning quick response for pH adjustment and calcium nutrition. Effective at reduced application rates due to its micronized particle size and reactivity, MICRONA can help growers lower input costs.

Superior Acid Neutralization:

The rate of acid neutralization strongly depends on the rate of dissolution of calcium carbonate. While particle size has a significant influence on reactivity, we found that variations in reaction times exist regardless of particle size. Tests show that different ag-lime materials in general, can vary in terms of reactivity and soil neutralization. (Table 1) MICRONA is able to react and neutralize soil acids very efficiently.

Reduced Application Rates = Reduced Cost

Time and distance are formidable obstacles for any crop producer. Liming, like other crop fertility applications, can be costly. Targeting nutrient application to crop needs, optimum placement, and utilizing high quality lime can maximize effectiveness and affordability.

MICRONA works better because smaller particles have a higher surface area to volume ratio, thereby enhancing reactions. Contrary to common belief, this very fine calcium material does not wash out, but is retained in the upper horizon of soil. The result is that less lime is required to both reach your desired pH and increase soil calcium levels. (Table 2)

With MICRONA, growers can use up to 50% less product than traditional recommendations, potentially resulting in lower labor and transportation cost.

MICRONA Crop Fertility Management

MICRONA not only acts faster, it also helps support proper soil structure and porosity which enhances plant respiration. With a particle size below 200 mesh, it supports natural biological life in the soil which more effectively releases needed minerals to the plant. It has long been known that most soil microbes are sensitive to acid soils. Research done by soil microbiologists shows that fine agricultural lime has the largest positive impact on earthworms and microbes compared to coarser lime or dolomite.¹

Micronized to maximize!

- MICRONA's high neutralizing value, micronized particle size, and solubility make it the most effective liming material on the market.
- Add MICRONA™ Agricultural Lime to your nutrient management program today.

LMT™
Lime Management Technology



MICRONA™ Agricultural Lime

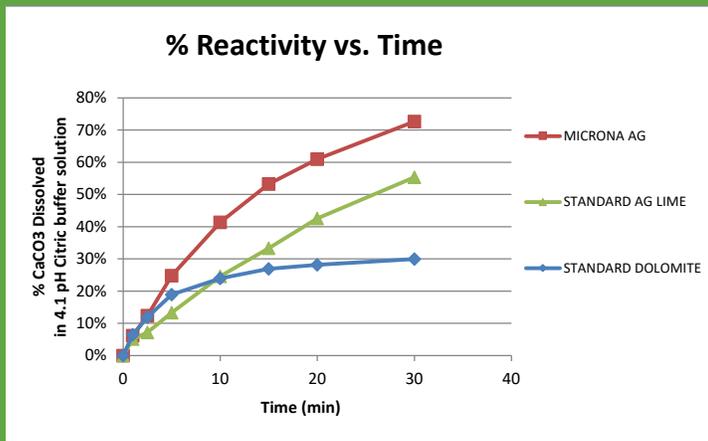


Table 1 - Analyzing various liming materials of similar particle size.

MICRONA™ Agricultural Lime

Guaranteed Analysis

Calcium (Ca)	38%
Calcium Carbonate (CaCO ₃)	96%
Magnesium Carbonate (MgCO ₃)	0.5%
Calcium Carbonate Equivalent (CCE)	98%
Oregon Lime Score	97
Derived from limestone.	

Sieve Analysis

Amount passing 60 mesh sieve:	100%
Amount passing 100 mesh sieve:	100%
Amount passing 200 mesh sieve:	95%

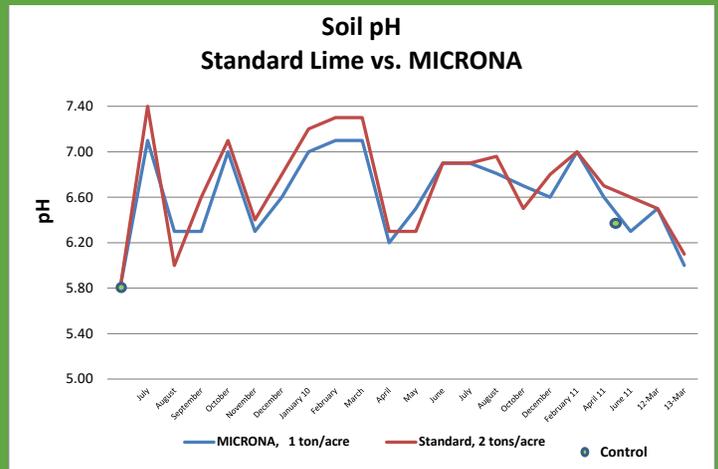
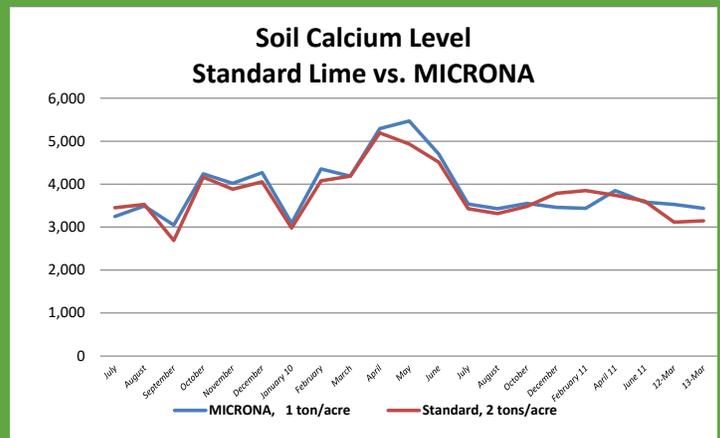


Table 2- Comparing MICRONA™ very fine limestone at 1 ton per acre with standard lime at 2 ton per acre over a 3 year period in Oregon Willamette Valley grass seed fields.

MICRONA = 50% less input, but gain the same or better results.



Application Information

Typical range of application 200 - 3000 lbs per acre based on soil tests, cropping requirements and local experience.

¹MICROBIAL ACTIVITY AFFECTED BY LIME IN A LONG-TERM NO-TILL SOIL, Juan P. Fuentes, David F. Bezdicek, Markus Flury, Stephan Albrecht, Jeffrey L. Smith. Soil & Tillage Research 88 (2006).

Notes:



A Division of Columbia River Carbonates
300 N Pekin Rd., Woodland, WA 98674

(360) 225-6505

MICRONAag.com

Although the information are presented in good faith and believed to be correct, Columbia River Carbonates makes no representations or warranties as to the completeness or accuracy of the information. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Columbia River Carbonates be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information from this site or the products to which the information refers. THIS INFORMATION IS PROVIDED WITHOUT REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCTS TO WHICH INFORMATION REFERS.