VERDE-CAL®

Enhanced Calcitic Limestone

With thCa Organic Complexing Technology

- **Provides available Calcium**
- **Improves soil structure (flocculation and infiltration)**
- **Supplies optimal Calcium levels to the soil and plant**
- **Quicker soil and plant response with lower rates than traditional Calcium applications**

For more information on VERDE-CAL® or other VERDE-CAL® products, visit us at www.verde-cal.com.

Navigates You Toward BALANCED Soil Nutrition

AQUA·AID

800-394-1551
www.aquaaid.com
www.verde-cal.com

VERDE-CAL®

Enhanced Calcitic Limestone

Calcitic limestone combined with **thCa**™, an organic complexing agent, converts insoluble Calcium (Ca) compounds to soluble and available Calcium (Ca). This allows for greater delivery of Calcium (Ca) to the exchange sites on the soil colloid. **VERDE-CAL** contains Aqua-Aid Penetrant which synergizes with **thCa**™, providing uniform nutrient movement into the entire soil profile.

FEATURES AND BENEFITS OF USING VERDE-CAL®

- 500 pounds will yield results equivalent to 1 ton of typical lime.
- Reduces Hydrogen (H), Sodium (Na), and Chlorine (Cl) in the plant and soil.
- Improves germination, stimulates root growth, and enhances microbial activity
- Increases essential nutrient absorption and translocation
- Improves soil structure (flocculation, water infiltration).
- Supplies optimal Calcium (Ca) levels to plant cells to strengthen the plant's resistance to disease.
- Balances the Ca/N ratio in the plant.
- Quicker response at lower rates. Requires 1/4 the rate of standard lime per application.

APPLICATION RECOMMENDATIONS

To maintain optimum pH and growing conditions, apply **VERDE-CAL®** at 5 pounds per 1,000 ft^2 or 220 pounds per acre (250 kg/ha) at least twice per growing season, or as needed. Soil test recommendations should be used to determine liming needs.

To adjust pH, apply **VERDE-CAL®** at 10 pounds per 1,000 ft^2 or 435 pounds per acre (500 kg/ha), or as needed. In most soils this will raise the soil pH up to one full point. Retest and reapply, if needed, at this rate.

Distributed by:

AQUA-AID

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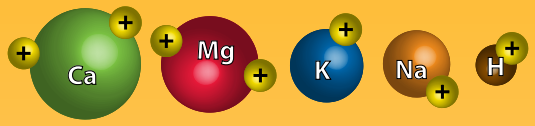
CATION COMPARISON

Basic Cations



40 24 39 23 1

Atomic Weight

The soil colloid has degrees of affinity for various basic cations. This bonding increases with larger atomic weight, ion size and amount of charge.

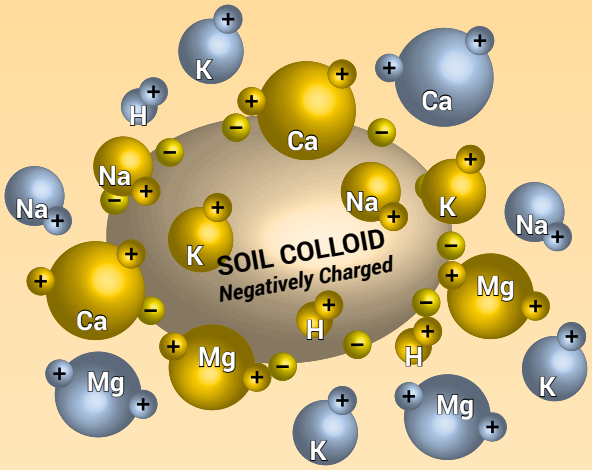
The percentage saturation for each of the cations will usually be within the following ranges for optimum performance:

Calcium (Ca)	65 - 70 %
Magnesium (Mg) . . .	10 - 18 %
Potassium (K)	3 - 6 %
Sodium (Na)	1 - 2 %
Hydrogen (H)	10 - 15 %

The process of cationic exchange begins when water and basic cations (Ca, Mg, K, Na) meet the soil colloid. Based on the soil colloid's degree of cation affinity, Calcium (Ca) will attach to the soil colloid releasing the smaller cations. The released cations (Mg++, Na+, K+, H+) are solubilized in the soil solution and made available to the plant or removed from the soil profile. As hydrogen is released from the soil colloid into the soil solution, acidity is reduced and pH is raised.

THE CATIONIC EXCHANGE COMPLEX

The mixture of Water, Soil, Colloids and Cations



Exchangeable cations are those absorbed on the colloid. Water soluble cations are those ionized in the soil solution. CEC is determined by the number of negative sights on the colloids.

* A & L Plains Laboratories, Inc.