

Alkalinity and pH Treatment

The Natural Solution to Improve Irrigation Water, Soil Penetration, and Hydration





INNOVATIVE TECHNOLOGIES
CUSTOMIZED SOLUTIONS



Alkalinity and pH Treatment

STABILIZE IRRIGATION WATER pH

High pH irrigation waters contain significant levels of carbonates and bicarbonates. When repeatedly introduced into soils, these substances shift soil pH towards the alkaline side of the spectrum. Such a shift can negatively affect soil microbiology and reduce the availability of soil nutrients. By pre-treating irrigation waters with **Aqua-Carbon**, carbonates and bicarbonates are converted to highly-soluble and organically-rich lignosulfonate salts, which stabilize soil pH and serve as a source of nutrition for soil microbes.

SOIL ACIDIFICATION WITH AQUA-CARBON

Improper soil pH can adversely impact turf quality. Originating from organic plant material, **Aqua-Carbon** conditions soils by reducing alkalinity and lowering soil pH.

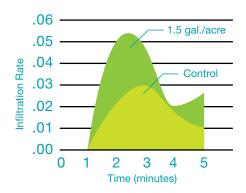
Field trials have shown that the addition of **Aqua-Carbon** to standard fertility programs can:

- Add organic matter
- · Reduce soluble salts
- Increase cation exchange capacity
- · Stimulate microbial activity in the soil
- Improve water penetration

In addition, the long term use of Aqua-Carbon can:

- Increase readily available calcium and organic sulfur to soils
- Provide both rapid and slow release carbon to soils

The Effect of **Aqua-Carbon** on the Permeability of Puddled Sodic Soils



USE BENEFITS OF AQUA-CARBON

- Lowering the pH of irrigation water
- Increasing infiltration of applied water
- Increasing soil moisture
- Softening seed coat for germination
- Minimizing scale formation in drip irrigation lines
- Maximizing nutrient availability
- Optimizing soil pH

COMPOSITION

Aqua-Carbon is a combination of a modified organic acid derived from lignin and a nontoxic, non-ionic, biodegradable water base formulation of surfactants and wetting agents.

Active Ingredients:

41.0% Calcium lignosulfonate

3.5% Non-ionic polyols

55.5% Water

Aqua-Carbon Penetrant is available in 55, 30 and 2.5 gallon recyclable containers.*

*Check with your distributor for availability.

APPLICATION RATES

Golf, Lawns, and Sports Turf

Apply 3 to 5 ounces per 1,000 ft 2 in 2 gallons of water (10 to 16 L/ha in 800 L) at 15 day intervals or as needed.

Irrigate with sufficient water to deliver Aqua-Carbon to the soil profile - 1/8 inch (3 mm) or more recommended.

Inject 1 to 1.5 gallons per acre (10 to 16 L/ha) at 15 day intervals or as needed.



5484 S. Old Carriage Road Rocky Mount, NC 27803

