



## Enhanced Efficiency Nutrient Technology

Crystal Green is the first slow-release nutrient technology to offer plant-available phosphorus, with nitrogen and magnesium, in one citrate-soluble granule. It provides your turf with a slow-release and environmentally responsible fertilizer, delivering consistent, plant-activated nutrients, right when the roots need it most. The low water solubility in Crystal Green means the granules do not dissolve in water, and are instead released as the plant requires the nutrients.

### Slow Release

- Lowers application rates and costs, minimizes nutrient loss and builds a denser, stronger root mass

### Plant-Activated Formulation

- Minimizes excess phosphorus in the soil, lowers the risk of leaching and runoff, and provides P as roots require it

### P, N and Mg formula releases simultaneously

- Increases color vibrancy and optimizes healthy turf

### Low-salt index of 7.7

- No plant burn – safe to plant near seeds and transplants



### Turf requires phosphorus for:

- Early seed establishment
- Healthy root development
- Disease resistance and stress recovery
- Building a denser root mass for optimal moisture and nutrient retention

### How it works

As turfgrass grows it produces organic acids, such as citrates, to help roots absorb nutrients. Formulated with citrate-soluble phosphorus, plus nitrogen and magnesium, Crystal Green granules have low water solubility, releasing slowly in response to organic acid production, gradually supplying the soil solution with nutrients to meet plant demand. This plant-activated nutrient release minimizes excess phosphorus in the soil, lowering the risk of leaching and runoff while providing the turf a season-long supply of phosphorus as the roots require it.

### Sustainable Phosphorus

Crystal Green addresses the necessary balance between adequate plant health and environmental stewardship. Crystal Green is not simply an enhanced efficiency fertilizer, it is also the most environmentally responsible source of phosphorus available.

The sustainable “cradle-to-cradle” solution safeguards precious water resources at both ends of the water-nutrient cycle. First, essential nutrients are recovered, such as phosphorus and nitrogen, from process water streams, thereby preventing them from entering the watershed in the first place. Then these nutrients are transformed into a viable alternative to conventional phosphorus fertilizer, which, in turn reduces the risk of fertilizer leaching and runoff into adjacent waterways, due to its slow-release and citrate-soluble formulation.

### Slow-release

Crystal Green is a 99.9% pure, crystalline compound and a slow-release form of phosphorus, nitrogen and magnesium. Slow-release means season-long availability and reduced risk of runoff into adjacent waterways. The nutrients remain in the soil for improved plant performance, greener plants and significant cost and time savings, while providing environmental benefits. Providing sustained, season-long nutrients, Crystal Green lowers application rates and costs, minimizes nutrient loss and builds a denser, stronger root mass.

### Denser Root Mass

Unlike conventional monoammonium phosphate (MAP) or diammonium phosphate (DAP) fertilizers, Crystal Green lasts all season long, minimizing application rates and facilitating winter survival and rapid spring green up.

A study conducted by Cornell University investigated the effect of Crystal Green and DAP on the root mass of Kentucky bluegrass eight months after seeding.

The results showed that turf treated with a single application of Crystal Green had a root mass that was nearly 22% larger than eight metered applications of DAP and approximately 45% larger than a single application of DAP.

### Crystal Green vs MAP - Nutrient Release

