



EnPTURF[®]

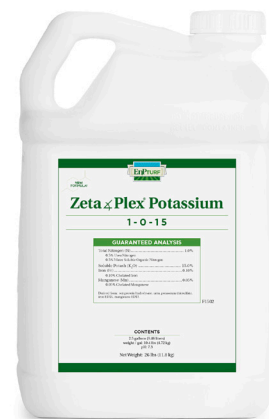
WINTER PREPARATION PROGRAM

As daylight hours decrease in the fall, turfgrass naturally undergoes a process called hardening off. It's the plant's way to defend against freezing and winter damage by building tolerance to cold temperatures. Turfgrass hardens off by storing carbohydrates in the cells of the crown and root tissues, increasing cell solute concentration, accumulating proteins, and strengthening cell wall structures.

Higher levels of carbohydrates and potassium increase solute concentrations and act as antifreeze, which prevents ice crystals from forming within the cells. Cell walls and membranes undergo changes that improve their ability to tolerate ice crystals while the moisture content in the plant tissues decrease.

The EnP Turf Winter Preparation Program will enhance the plant's natural efforts to prepare for winter. It's a simple plan that helps the plant maximize its physiological activity in terms of winter protection.

Apply these products in tank mix solution at recommended label rates. Spray bi-weekly beginning early to mid-October. Since the amino acids will enhance uptake of systemic control products, include necessary fungicides and growth regulators with these late season sprays. Snow mold control will also be enhanced when tank mixed with this late season nutrient combo.





WINTER PREPARATION PROGRAM

Build the health of your turf this fall in order to sustain the rigors of winter stress.

- › Increase photosynthetic activity for further carbohydrate production
- › Better transformation of sugars to starch
- › Greater carbohydrate storage
- › Ensure proper hardening off to improve freeze and desiccation tolerance
- › Improve nutrient use efficiency and conserve energy
- › Increase rooting
- › Improve snow mold controls

Zeta₄Plex[®] Potassium

A premium K source that is formulated with amino acid technology. This maximizes uptake of K even during cooler temperatures. Potassium directly and indirectly increases cell solutes which act as the plant's natural antifreeze. The K⁺ ion itself will increase solute concentration. Additionally, K is necessary for the conversion of simple sugars to carbohydrates. This is important since carbohydrates are also used by the plant to increase solute concentrations.

Zeta₄Plex[®] Grow 40

A concentrated amino acid supplement which improves plant performance in multiple ways:

- › Zeta₄Plex Grow 40 provides natural cell solutes that protect from freeze damage and desiccation.
- › It increases photosynthesis, resulting in better carbohydrate production.
- › Zeta₄Plex Grow 40 helps the plant build proteins more efficiently, resulting in better conservation
- › carbohydrates. This means the plant can store more carbohydrates for the approaching winter.

Energy

A molasses and gluconate-based micronutrient package. Chelated micronutrients maximize photosynthesis, helping to increase carbohydrate production. High grade, natural blackstrap molasses works to supplement carbohydrates to the plant when conditions are less conducive for photosynthesis. Energy contains zinc, which is instrumental in protein synthesis and carbohydrate metabolism.

Zeta₄Plex[®] Calcium

Ca and strengthens cell walls and cuticles for better cold temperature and traffic stress tolerance. A physically stronger plant will handle all of the pitfalls of winter weather and traffic more effectively. Ca²⁺ ion and natural plant metabolites will increase cell solute solution to protect the chlorophyll molecule.