

Optimizing Nitrogen Performance to Gain Advantages

BETTER THAN UREA ALONE

Urea has been applied for decades, because it provides quick green-up. However, up to 40% of the applied nitrogen can be lost within days, due to leaching, denitrification, runoff and volatilization. As a result, multiple applications are needed.

By amending this valued resource with a coating, reacting it with other components or adding inhibitors, Koch Turf & Ornamental has developed enhanced efficiency fertilizers (EEFs) that maximize nutrient uptake and minimize loss. This advantage, along with extended longevities and fewer applications to consistently deliver needed nutrition, saves time, money and optimizes labor. Compared to the potential challenges of applying just urea, the EEFs listed here are a better solution—and—a better way to fertilize.



Enhanced Efficiency Fertilizer PORTFOLIO

CONTROLLED-RELEASE

CONTROLLED-RELEASE fertilizers protect nitrogen inside a durable coating. This polymer precisely meters nutrient release based primarily on soil temperature, making nitrogen available when the plant can use it.



SLOW-RELEASE

POLYMER-COATED SULFUR-COATED UREA (PCSCU) fertilizers are economical, medium longevity products that rely on a dual coating of both a polymer and sulfur to control nutrient release.



REACTED FERTILIZERS store nitrogen in a chain that requires microbial activity to initiate its release. The release rate is related to chain length, making nitrogen available to the plant over a longer period of time without additional applications.



STABILIZED NITROGEN

STABILIZED NITROGEN fertilizers contain a urease inhibitor that temporarily prevents naturally occurring urease from breaking down urea, and a nitrification inhibitor to slow the conversion of ammonium to nitrate. Loss by volatilization is reduced, and fertilizer remains in the positively charged ammonium form longer, interacting with the soil, to enhance availability for plant uptake.

