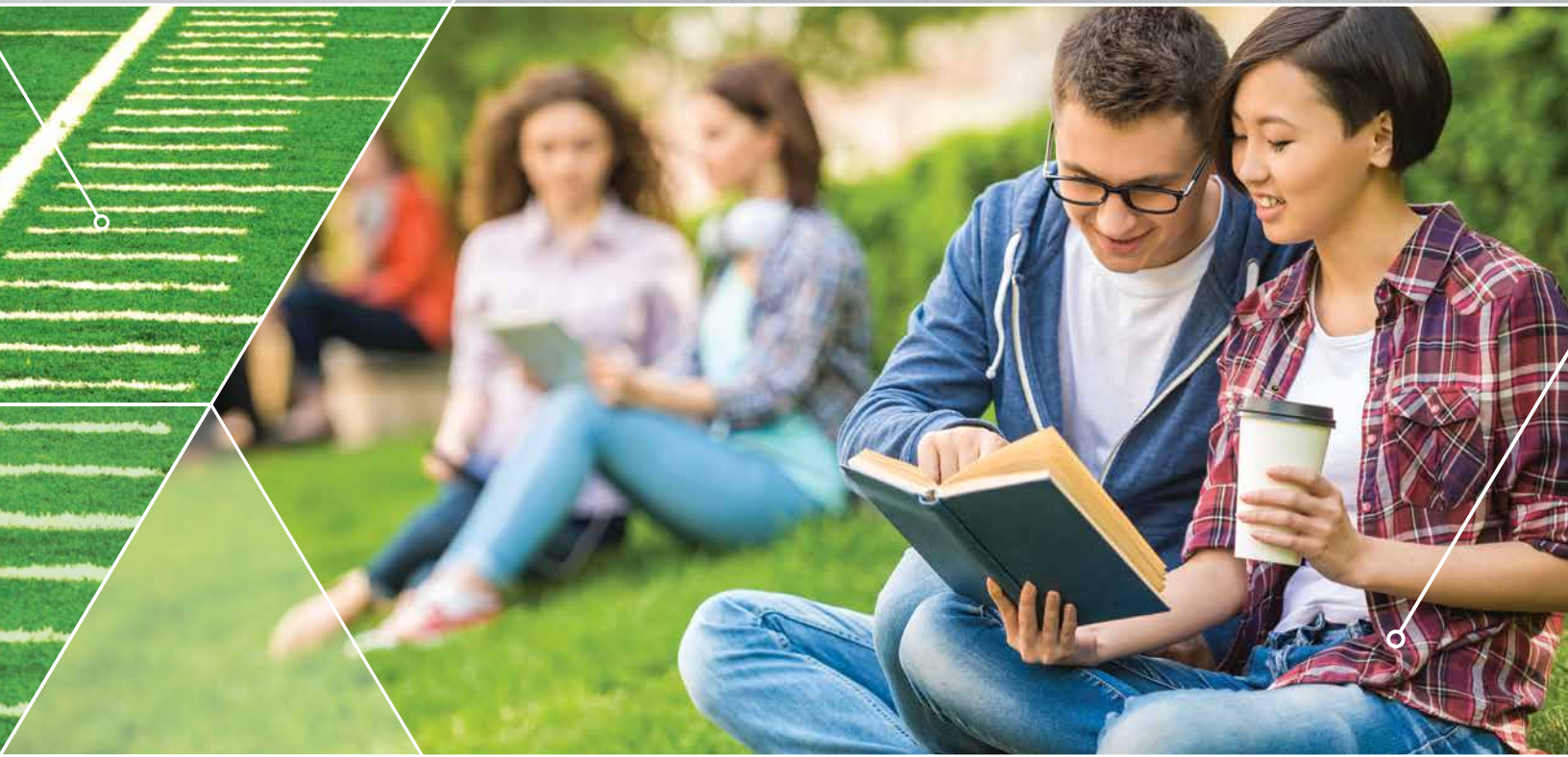




Exploring a Better Way to Fertilize™ CAMPUS GREEN SPACES AND SPORTS FIELDS





NOW IS THE TIME

to Take a Closer Look at Your Fertilizer Programs

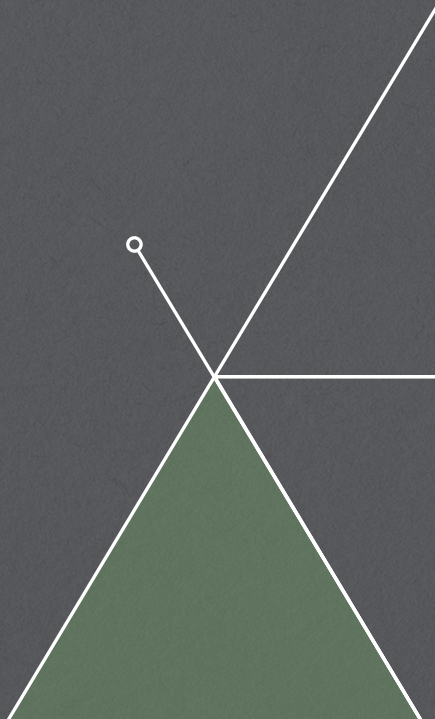
The green spaces and sports fields around your campus need to be properly maintained. That's where you come in. Every year, you put together a fertilizer program to promote healthy, vigorous plant growth. It can be challenging when confronted by:

- Rising operating costs
- Labor allocation issues
- Tighter budgets
- Environmental concerns

With so many available options, it has become increasingly difficult to choose which nutritional components need to be blended together to achieve a level of performance that is not only better for the plant and the environment, but is better for those who apply them.

This is where we come in. Koch Turf & Ornamental manufactures and supplies a proven portfolio of enhanced efficiency fertilizers (EEFs), which are backed by years of scientific research. More grounds and sports field managers are choosing EEFs, because they recognize the valued advantages of incorporating these technologies into their nutritional programs.

Take time to explore all the EEF advantages discussed here — and — at **KochTurf.com/campus**. Then consult with your Koch sales representative at the same address about gaining an edge with A Better Way to Fertilize™.



BETTER FOR THE PLANT

Research results from studies conducted at leading universities indicate that the technologies utilized by enhanced efficiency fertilizers (EEFs) are more effective in optimizing plant nutrient uptake when compared to non-EEF sources. Additional studies show that EEFs reduce the potential of nutrient losses to the environment (i.e. leaching denitrification, runoff or volatilization) when compared to an appropriate reference product, such as ammonium sulfate. These performance advantages are equally impressive:

- Minimizes growth flushes, reducing unplanned mowing and clippings/hardscape clean-up
- Consistent nutrient delivery minimizes the feast/famine cycle that can cause stress; green spaces can be more tolerant to weeds and diseases; sports turf recovers more quickly from the wear and tear of ongoing activity
- EEF technology, longevity and SGN options enhance the ability to tailor fertilization programs that meet budget needs and specific plant nutritional requirements

By comparison, EEFs are proven to be better for the plant—and when applied on your green spaces or sports fields—are a better way to help you maximize your nutritional investment.

LONGEVITIES EQUAL ADVANTAGES

Applying less to do more is another EEF advantage when compared to quick-release sources like unamended urea. With longevity up to 26 weeks, fewer applications are needed to effectively promote plant health and growth. Not only does this help to reduce overall fertilizer expenses by saving you money on equipment upkeep costs, these additional advantages also work in your favor:

- Allows for optimized labor allocation
 - *Less time fertilizing frees up crews to complete other tasks*
- By applying EEFs, nitrogen (N) use can be reduced by up to 40% when compared to unamended sources such as ammonium sulfate
 - *Saves money and helps to efficiently manage the use of this valued fertilizer resource*
- Responsible N utilization also helps to support any environmental initiatives that may be in place on your campus



FROM A GREEN SPACE PERSPECTIVE

Making fewer fertilizer applications per year limits the disruption of your maintenance crews. This keeps green spaces available for use by students who appreciate the opportunity to take full advantage of these relaxing and well-maintained environments.

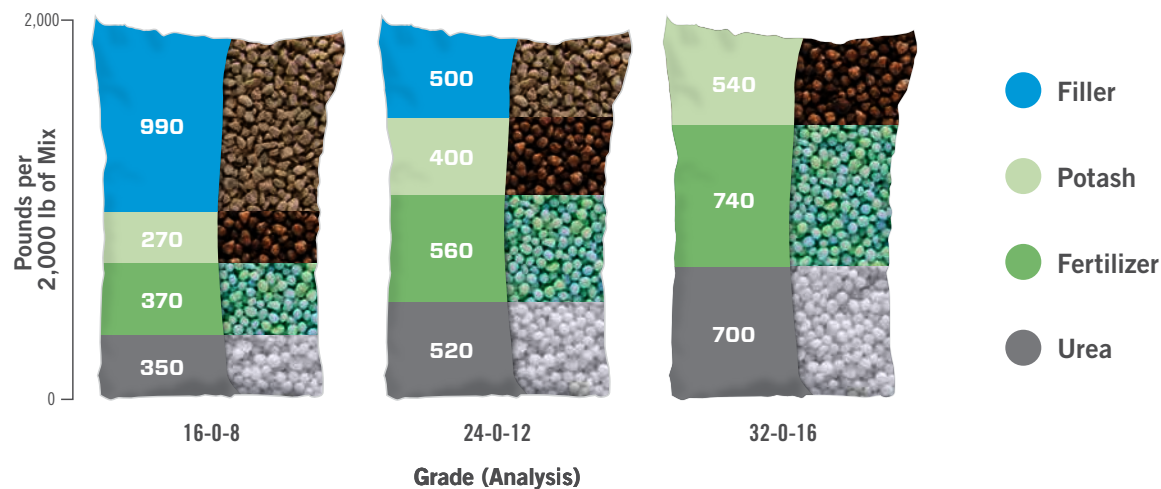


FROM A SPORTS FIELD PERSPECTIVE

Fewer applications ease the frustration of trying to schedule around competitive activities, practice sessions and other on-field events. It also limits disruption of your crews and minimizes their visibility when fertilizing these high-use areas.

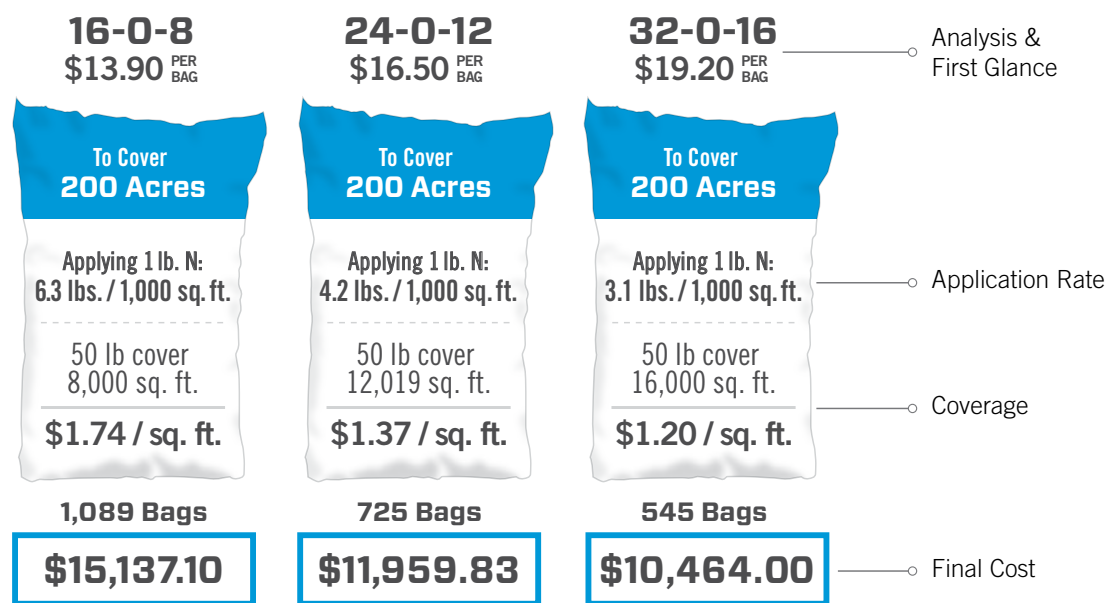
YOU NEED TO KNOW WHAT'S IN THE BAG

What is really in a 50-pound bag of blended granular fertilizer? It all depends on the ratio of components that make up the analysis. In this example, the bag on the left contains 50% filler, which is typically limestone. If you were to purchase this bag, half of what you bought has very minimal nutritional value. By adding higher percentages of EEF technology, filler is reduced. With these higher percentages, more of the N you pay for contributes to the health of the plant. Higher percentages also make this a better value as illustrated by the following example.



PRICE-PER-BAG VS. COST-PER-ACRE

If you are buying blended granular fertilizers—and wanting to optimize your nutritional investment—then looking at bag cost alone may not be the best approach. You need to consider other important factors that contribute to a better cost-in-use. The more EEF technology inside the bag can decrease the amount needed to cover the same ground when compared to bags containing less. **Bottom line:** You can cover more ground, with fewer bags to handle at a lower cost-per-acre.



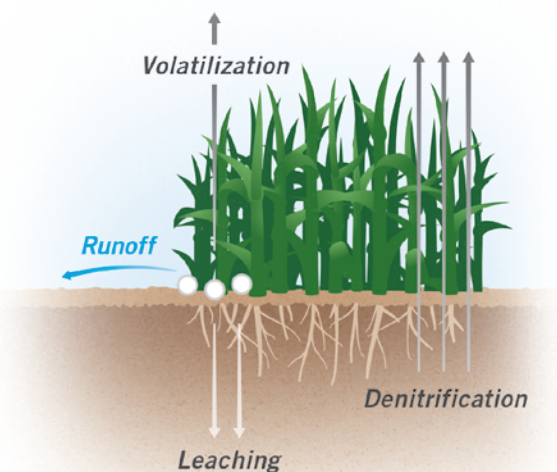
Pricing information is for representative purposes only and does not constitute an offer.

EFFECTIVE AND RESPONSIBLE

All EEFs provide increased nutrient uptake, while reducing potential nutrient losses to the environment. Choosing to bring EEFs onto your campus is a proactive step in light of increasing regulations and restrictions on fertilizer use. It also shows your commitment to responsibly participate in any sustainability initiatives your institution may have in place.

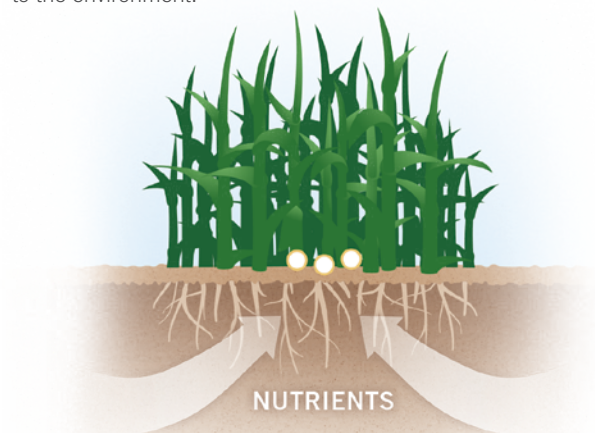
CONVENTIONAL FERTILIZER

Illustrated here is what may happen when N moves off-site and is not available to the plant. It can run off the surface or leach through the soil profile, and may migrate into water sources. Nitrogen may also be lost to the atmosphere through volatilization or denitrification.



ENHANCED EFFICIENCY FERTILIZERS

With EEFs, N stays in the root zone longer to consistently deliver nutrition to the plant, optimizing efficiency and minimizing losses to the environment.



TECHNOLOGY OVERVIEWS

When urea is amended with a coating, reacted with other components or infused with inhibitors, it becomes an EEF. These technologies regulate the release of N, resulting in more consistent and reliable delivery and extended longevities. These technologies help you effectively promote healthy plant growth, while optimizing your fertilizer investment.



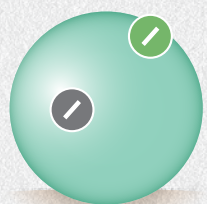
CONTROLLED-RELEASE

A polymer coating surrounds urea and that regulates the availability and release of N to the plant. The release is temperature-driven and not affected by moisture or rainfall, so it is more consistent and predictable. Longevities range from 45-180 days.



SLOW-RELEASE

These products provide greater longevities of available nutrition than quick-release sources, and are safer to use because of their lower burn potential. This group includes polymer-coated sulfur-coated urea (PCSCU) fertilizers, as well as reacted urea products. Longevities range from 10 to 22 weeks.



STABILIZED NITROGEN

These products work on and below the soil surface to keep more usable N in place longer; a urease inhibitor minimizes volatilization and a nitrification inhibitor reduces losses through denitrification and leaching. Longevities range from 8 to 12 weeks.

Committed to Supporting Your Success

Sharing what we know about enhanced efficiency fertilizers (EEFs) can make it easier to understand how these technologies may benefit your campus green spaces and sports fields, while helping to optimize your nutritional investment. Contact your Koch Turf & Ornamental sales representative to discuss your current nutritional programs and for guidance in determining which of these products can be incorporated to gain advantages—from saving you time and money to being even more environmentally responsible. For additional insights, visit KochTurf.com/campus.

CONTROLLED-RELEASE



SLOW-RELEASE



STABILIZED NITROGEN



KochTurf.com