

Stabilized Nitrogen Fertilizers For Turfgrass

CAPABILITIES AND COMPARISONS

IT'S IMPORTANT TO KNOW:

Not all stabilized nitrogen fertilizers are created for the same purpose.

Koch Agronomic Services develops stabilized nitrogen fertilizers for specific markets based on plant needs and application practices.

- AGROTAIN® nitrogen stabilizer is an important tool in minimizing nitrogen loss due to volatilization in broad acre agricultural crops.
- UMAXX® and UFLEXX® stabilized nitrogen products protect against all three forms of loss — volatilization, leaching and denitrification — while keeping nitrogen in place longer to facilitate plant uptake in turf and ornamental applications.

Best management practices dictate these products should be applied in the markets for which they were developed to optimize their performance.

THE DATA PROVES OTHER INHIBITORS DO NOT PROVIDE THE SAME AMOUNT OF ACTIVE INGREDIENTS AS UMAXX® AND UFLEXX®.

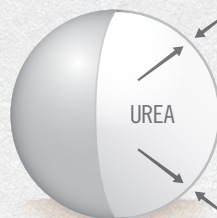
	NBPT	DCD
Product	ppm	ppm
DCD surface**	—	1,300
AGROTAIN®*	650	—
UMAXX®	900	21,000
UFLEXX®	900	10,500

*AGROTAIN® treated urea applied at 3 qt/ton

**DCD surface = surface applied product using 25% (w/w) liquid DCD applied at the labeled rate of 4 qt/ton

IT'S IMPORTANT TO KNOW:

Not all stabilized nitrogen fertilizers are created equal.



SPRAY-ON INHIBITORS

With this manufacturing process liquid NBPT/DCD is surface-applied onto granules of urea during the blending process.

- NBPT alone will control nitrogen losses due to volatilization, but does not reduce denitrification or leaching.
- This protection is provided by DCD and is what extends plant response in turfgrass.
- The application of **liquid DCD** provides a limited amount of inhibitor to the urea. There is not a high enough concentration of active ingredient to provide adequate protection from losses.



UMAXX® and UFLEXX® Stabilized Nitrogen Fertilizers

NBPT (urease inhibitor) and DCD (nitrification inhibitor) are incorporated and evenly distributed throughout granules of urea. This ensures proper amounts of active ingredient in each granule.

- UMAXX® stabilized nitrogen provides **up to 16 times** the amount of DCD compared to surface-applied DCD products at the label rate of 4 qt/ton (based on common products within the liquid DCD market).
- UFLEXX® stabilized nitrogen provides **up to 8 times** the amount of DCD compared to surface-applied DCD products at the label rate of 4 qt/ton (based on common products within the liquid DCD market).
- **Research dating back 15 years** demonstrates that the rates of NBPT and DCD in UMAXX® and UFLEXX® stabilized nitrogen will provide an extended plant response in turfgrass.