



Enhanced Efficiency Fertilizer

What is All-N?

All-N is UREA or UAN nitrogen that has been treated by Hi-Line Coop with NBPT and DCD, making it a dual mode-of-action product.

How does it work?

All-N contains both active ingredients NBPT and DCD. While on the soil surface, the NBPT reduces the risk of nitrogen loss through volatilization by inhibiting the urease enzymes. Once the nitrogen is below the surface, DCD reduces the risk of leaching and denitrification by inhibiting the nitrosomonas bacteria, thus keeping the nitrogen in the plant available ammonium form longer.

Features & Benefits:

- » Use when nitrogen is surface applied
- » Dual mode, above and below ground, protection
- » Active ingredients NBPT (N-(n-butyl) thiophosphoric triamide) and DCD (dicyandiamide), are AAPFCO defined urease and nitrification inhibitors
- » Ask your NRCS rep about conservation practice 590, the use of an Enhanced Efficiency Fertilizer could qualify you for cost share payments

Hi-Line Cooperative, Inc.

203 S Perkins Ave / Elsie, NE 69134 / (308) 352-2800





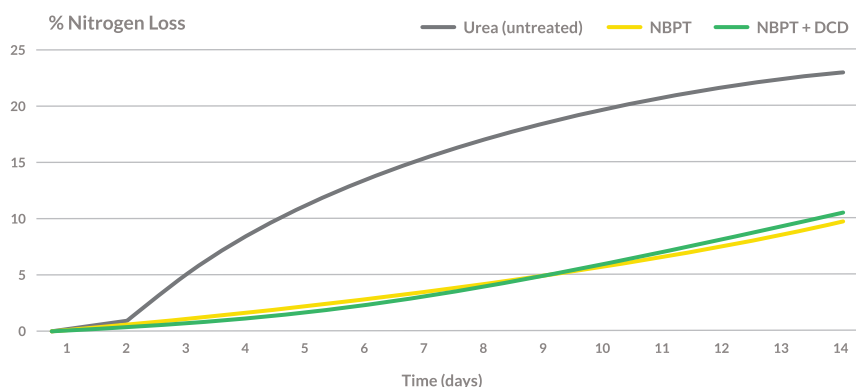
Enhanced Efficiency Fertilizer

Dual Mode Protection

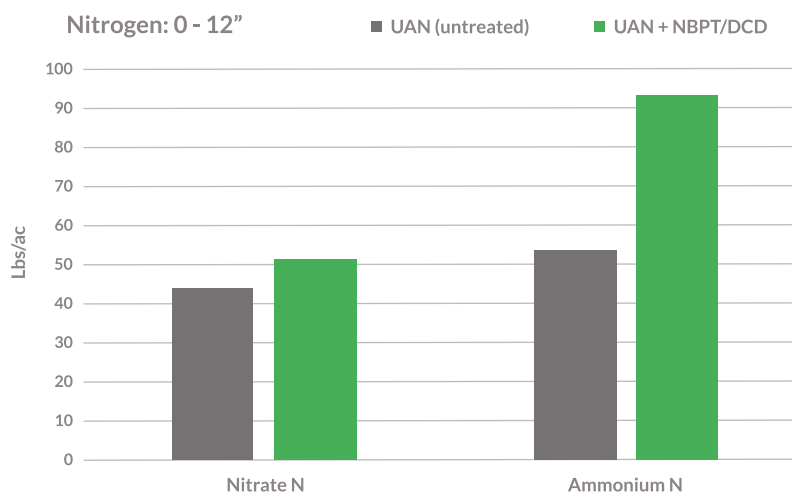
NBPT + DCD

All-N contains both active ingredients NBPT and DCD for protection on the soil surface as well as below ground.

This volatility study conducted by LSU shows how powerful NBPT is at protecting against volatility. The combination product (NBPT + DCD) proved just as effective as the straight NBPT product, and it also contains DCD for below ground protection.



This UAN leaching study conducted by the University of Florida demonstrates the effectiveness of DCD to keep nitrogen in the ammonium form. A 0 - 12" soil sample was taken after a 0.5" water event. The graph shows more nitrogen available when UAN is treated with NBPT/DCD combination.



NBPT and DCD are powerful active ingredients on their own, but they are just as effective when combined. Upgrade your nitrogen to All-N so your nitrogen is protected above and below ground.

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