

Facts From the Field

Thinking of Using UAN? Compare the ESN[®] Advantage

We all know the obvious difference between ESN and UAN (urea-ammonium nitrate solution). UAN is a 28-32% liquid nitrogen (N) source and ESN is a 44% granular N source.

There are several more differences to consider when choosing a N source:

- UAN requires specialized equipment – pumps, tanks and application.
- UAN can have higher trucking costs vs dry products – transporting a lot of water.
- Liquid blending options may be limited.
- UAN often requires multiple application trips which adds cost.
- UAN contains 25% of the N in the nitrate form, a form immediately susceptible to leaching and denitrification losses and a form not protected by inhibitors or stabilizers.
- An inhibitor or stabilizer should be added to protect the urea and ammonium portions from loss, increasing cost per acre and adding time to the application process.

A Kentucky Corn Study Demonstrates ESN's Advantages

- ESN produced 21 bu./ac. more yield and \$37/ac. more profit than UAN.
- ESN produced 12 bu./ac. more yield and \$35/ac. more profit than UAN with both urease and nitrification inhibitors.

N Source	Yield (bu./ac.)	Yield Increase vs Urea (bu./ac.)	Net Return Increase vs Urea (\$/ac.)
Urea	172	—	—
UAN	176	4	\$6.50
UAN w/NBPT	178	6	\$4.27
UAN w/NBPT & DCD	181	9	\$8.25
ESN	193	21	\$43.50

- Yields are means of three N rates, four replications, and two years
- All products surface broadcast before planting at average N rate of 150 lb N/ac.
- Net return calculations assume corn price of \$3.50/bu, ESN price premium of \$0.20/lb N over urea and \$0.15/lb N over UAN. Inhibitor costs assumed as follows: Agrotain Ultra @ \$105/gal (\$9.23/ac.) and Agrotain Plus SC for UAN @ \$22.40/gal (\$15.75/ac.)
- Study conducted at Owensboro, KY



ESN SMART NITROGEN

- Enhances nitrogen use efficiency
- Improves crop yield and quality
- Provides convenience through ease of use
- Environmentally responsible



HOW CAN WE HELP?

To make ESN a part of your nitrogen management program, contact an authorized retailer or ESN representative.

FOR MORE INFORMATION:

www.SmartNitrogen.com

ESN REPRESENTATIVE:



Learn more about the industry's leading environmentally smart nitrogen at www.SmartNitrogen.com

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