

# NITROGEN SOURCE COMPARISON CHART

## ENHANCED EFFICIENCY FERTILIZERS (EEFS) VS. UNTREATED/READILY AVAILABLE FERTILIZER

### CONTROLLED-RELEASE FERTILIZERS

Polymer-coated products that precisely meter nutrient release based on soil temperature — making nutrition available when plants can use it.



### SLOW-RELEASE FERTILIZERS

Reacted and polymer-coated sulfur-coated urea (PCSCU) technologies slow the release of nitrogen into the soil, making it available to the plant over a longer period of time.



### STABILIZED NITROGEN FERTILIZERS

Contains urease and nitrification inhibitors, enhancing nitrogen availability for the plant and reducing nitrogen loss due to volatilization, denitrification and leaching.



	UNTREATED/READILY AVAILABLE		CONTROLLED-RELEASE		SLOW-RELEASE				STABILIZED NITROGEN		
	UREA	AMMONIUM SULFATE	DURATION CR®	TTRU™	XCU®	NUTRALENE®	NITROFORM®	NITAMIN®	UFLEXX®	UMAXX®	HYDREXX® *
% Nitrogen	46	21	40 - 44	40 - 44	41 - 43	40	39	30	46	46	N/A
EEF	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Release Mechanism	Solubility / Hydrolysis	Solubility	Temperature-Controlled Diffusion	Temperature-Controlled Diffusion	Catastrophic Release / Diffusion Hybrid	Microbial	Microbial	Microbial	Solubility / Hydrolysis	Solubility / Hydrolysis	Solubility / Hydrolysis
Initial Response	1-2 Days	1-2 Days	1-3 Weeks	1-3 Weeks	3-7 Days	1-2 Weeks	2-3 Weeks	2-5 Days	2-5 Days	2-5 Days	2-5 Days
Approximate Longevity	1 - 4 Weeks	1 - 4 Weeks	1.5 - 6 Months	1.5 - 6 Months	1.5 - 2.5 Months	3 - 4 Months	4 - 5 Months	1.5 - 2.5 Months	1.5 - 2 Months	2.5 - 3 Months	1.5 - 3 Months Rate Dependent
Color	White	White	Tan	Light Blue	Blue Green	Bright Green	Bright Blue	Clear Liquid	Light Blue	Light Green	Powder
Application Visibility	Good	Good	Good	Good	Good	Good	Good	Add Spray Pattern Indicator	Good	Good	Add Spray Pattern Indicator
Labor Intensity	High	High	Low - Moderate	Low - Moderate	Moderate	Low	Low	Moderate	Moderate	Low - Moderate	Low - Moderate
Leaching Potential	High	High	Very Low	Very Low	Low	Low	Very Low	Low	Low	Very Low	Low
Volatilization Potential	High	Low	Very Low	Very Low	Moderate	Very Low	Very Low	Low	Very Low	Very Low	Very Low
Temperature Sensitivity	Low	Low	Moderate	Moderate	Moderate	High	High	High	Low	Low	Low
Moisture Sensitivity	High	High	Low	Low	Moderate	Low	Low	Low	Low	Low	Low
Preferred at pH > 7	No	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Preferred at pH < 7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Salt Index	74	68	N/A**	N/A**	N/A**	25	10	0.4	74	74	Based on N Source
Burn Potential***	High	High	Very Low	Very Low	Low	Very Low	Very Low	Low	High	High	High

\* HYDREXX is not a fertilizer. It is a fertilizer additive containing urease and nitrification inhibitors. The activity is similar to that of UFLEXX or UMAXX depending on the rate of HYDREXX used. Salt index or burn potential is based on the nitrogen fertilizer source used (urea, ammonium sulfate, UAN).

\*\* For coated products, the low rate of solute release from the coating results in an extremely low effective salt index, and therefore very low burn potential.

\*\*\* Although salt index may be low for some products, salts can accumulate from any product when used in container plants if adequate flushing is not provided.