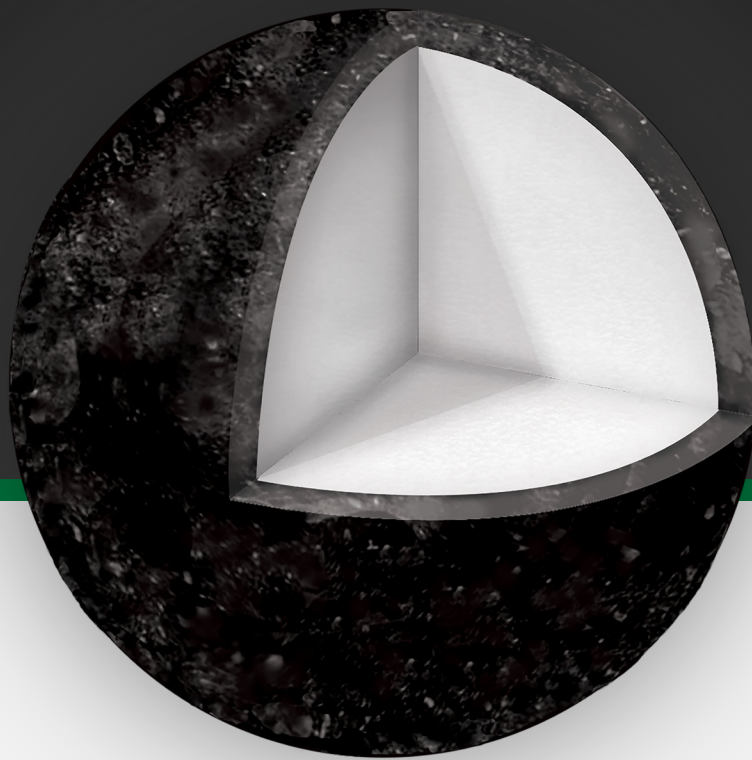




CARBONCOAT™

TECHNOLOGY



HCAS™

HUMIC COATED AMMONIUM SULFATE

HCU®

HUMIC COATED UREA

PCHCU™

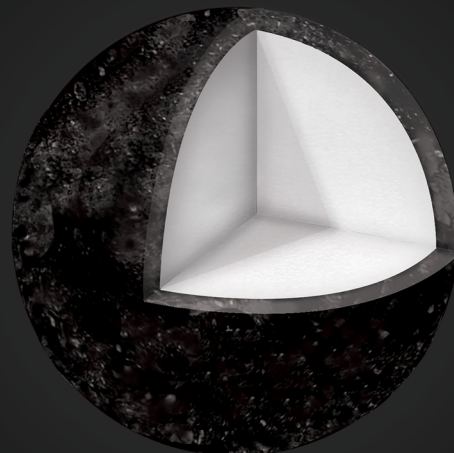
POLY-COATED HUMIC COATED UREA

INTRODUCING CARBONCOAT™ TECHNOLOGY

For decades, the industry has faced significant manufacturing challenges in attempting to coat nutrients with humic acid. This has resulted in the reliance on blended fertilizers containing granular or screened humates, or separate applications of fertilizer and humic material.

WITH CARBONCOAT, WE'VE SHIFTED THE STANDARD.

CarbonCoat utilizes a patented manufacturing process to bond fertilizer granules with a potassium humate coating. These clean, spherical, free-flowing granules deliver nitrogen and humic acid simultaneously. Select CarbonCoat products also utilize a polymer coating to extend their nutrient release.



THE CARBONCOAT FAMILY

HCU

44-0-0

Urea granules
with a potassium
humate coating

2% Humic Acid
(A&L Method)

7-14 day release

PCHCU

40-0-0

Urea granules with a
potassium humate coating
+ a polymer coating

1.8% Humic Acid
(A&L Method)

70 day release

HICAS

20-0-0-23S

Ammonium sulfate
granules with a potassium
humate coating

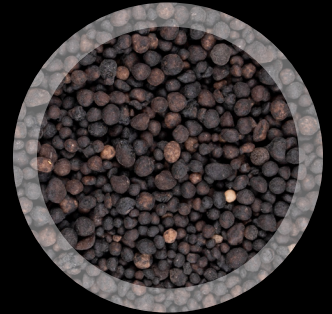
2% Humic Acid
(A&L Method)

7 day release



HUMIC COATED UREA 44-0-0 + HUMIC ACID

- Urea granules with potassium humate coating
- 100% soluble granules for use in both liquid and dry applications
- Provides equal or better performance compared to leading stabilized nitrogen products
- Offers strong economics in use
- Available as a stand-alone product and as a component in blends



POLY-COATED HUMIC COATED UREA 40-0-0 + HUMIC ACID

- Spherical, clean, free-flowing granules featuring HCU® as a base
- Offers an extended nitrogen release profile (70 days) with the humic acid benefits of HCU
- Provides higher plant-available nitrogen compared to other controlled-release nitrogen sources
- Allows for an overall reduction in nitrogen usage rates
- Available as a stand-alone product and as a component in blends



HUMIC COATED AMMONIUM SULFATE 20-0-0-23S + HUMIC ACID

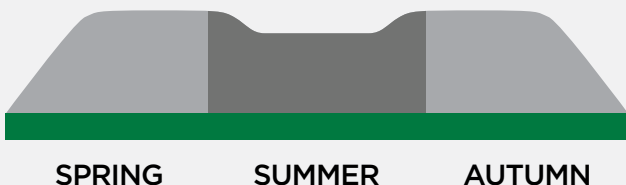
- Improves upon traditional ammonium sulfate granules by bonding them with potassium humate
- Provides all the benefits of adding humic acid to an agronomic program
- Represents an ideal nitrogen source for cooler-weather months
- Complements warmer-month applications of HCU or PCHCU
- Offered in a soluble granule for foliar applications and a larger granule for broadcast applications
- Available as a stand-alone product and as a component in blends



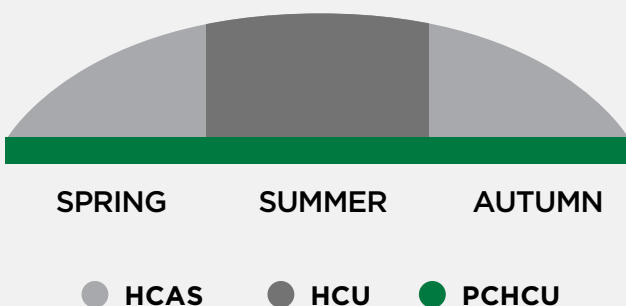
APPLICATION TIMING

HCU and PCHCU can be combined with HCAS to deliver nutrition and humic acid throughout the growing season.

COOL SEASON TURF

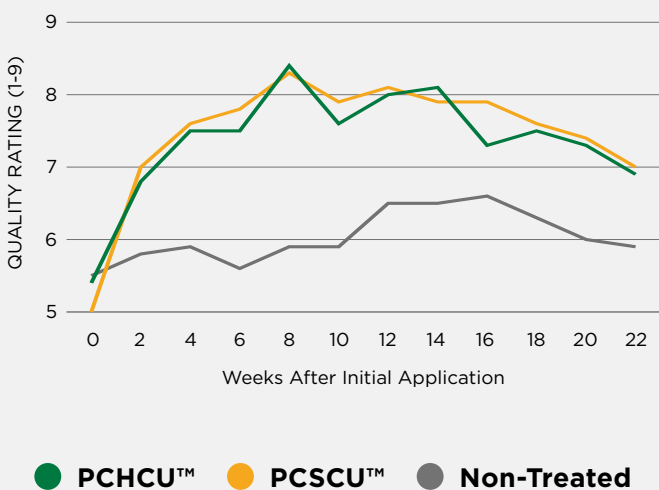


WARM SEASON TURF



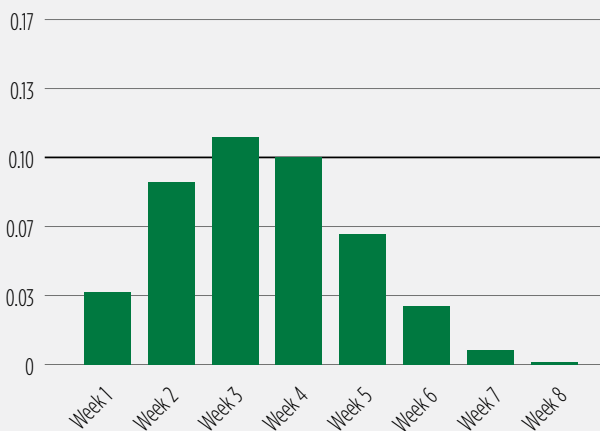
POLY-COATED HUMIC FERTILIZERS

AVERAGE TURF QUALITY

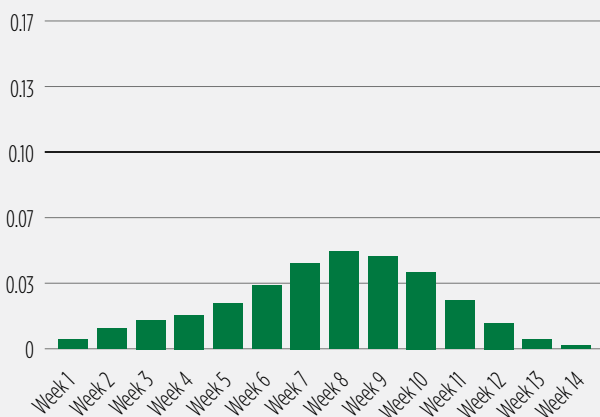


Research Summary: Showing data averaged over two years, average turf quality of PCHCU was equal to that of PCSCU. Turfgrass evaluated was Kentucky bluegrass at 3" height of cut.

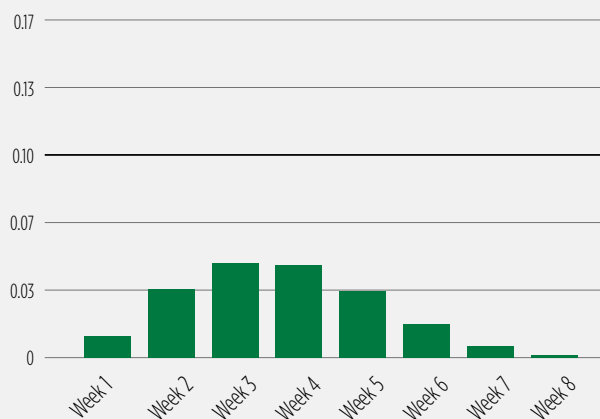
TURFGRASS RESPONSE TO HCU®



TURFGRASS RESPONSE TO PCHCU®



TURFGRASS RESPONSE TO HCASTM



■ GRANULAR N TURF RESPONSE **— TARGET N**

All graphs represent a release rate of the respective technology applied on May 7th at 1 lb. N/1000 sq. ft. The designated USDA climate zone for these graphical representations was region 5b.

CARBONCOAT™ PRODUCTS

Product Product Code	Feature	SGN	Application		Typical Rates			Other Nutrients (%)				Density (lbs/ft³)	Pkg. Wt.
			Sprayable	Spreadable	Products Lbs/M	Nutrients Lbs/M	Humic Lbs/Acre	Ca	Mg	S	Fe		
HCU® 44-0-0 10006117	2% Humic acid	Standard	X	X	1.7 - 3.41	0.75 - 1.5 N	1.5 - 3.0	-	-	-	-	46.0	50 lb
PCHCU™ 40-0-0 10007943	1.8% Humic acid	Standard		X	1.25 - 2.5	0.5 - 1.0 N	0.98 - 1.96	-	-	-	-	46.0	50 lb
HCAS™ 20-0-0 10007580	2% Humic acid	280		X	2.5 - 5.0	0.5 - 1.0 N	2.18 - 4.36	-	-	23.0	-	58.0	50 lb
HCAS™ SG 20-0-0 10007653	2% Humic acid	100	X		0.25 - 2.5	0.05 - 0.5 N	0.22 - 2.18	-	-	23.0	-	58.0	25 lb

CARBONCOAT BLENDS

9-12-6 with HCU® 10005895	37% HCU and SmartPhos DG	Standard		X	4.0 - 8.0	0.36 - 0.72 N	3.22 - 6.44	6.1	2.0	6.7	1.0	54.6	50 lb
16-3-3 with CarbonCoat™ and SmartPhos® DG 10008030	50% PCHCU, 50% HCAS, and SmartPhos DG	Standard		X	3.13 - 6.25	0.5 - 1.0 N	1.36 - 2.72	-	1.0	8.6	-	58.2	50 lb
22-0-4 with HCU™ 10005848	50% HCU, Black Gypsum DG	Standard		X	3.5 - 4.5	0.77 - 0.99 N	7.17 - 9.21	7.2	-	6.9	-	49.3	50 lb
24-0-4 with CarbonCoat™ 10008031	75% PCHCU and 25% HCAS	Standard		X	2.1 - 4.2	0.5 - 1.0 N	1.28 - 2.56	-	-	6.9	-	55.19	50 lb
34-0-6 with CarbonCoat™ 10008032	100% PCHCU	Standard		X	1.48 - 3.00	0.5 - 1.0 N	0.97 - 1.96	-	-	-	-	48.82	50 lb

CARBONCOAT BLENDS

Our rich history of innovation continues with the introduction of CarbonCoat fertility blends. Featuring industry-leading quality components such as humic acid, SmartPhos DG slow-release phosphorus, micronutrients, and dual nitrogen sources, CarbonCoat fertility blends offer turf managers flexibility in fertility applications. With formulations containing as much as 100% slow-release nitrogen and delivering humic acid rates up to nine pounds per acre, the CarbonCoat family offers a blend for any season or turfgrass species.



AndersonsPlantNutrient.com/Turf
800-253-5296



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