- FERTILIZERS
- SPREADERS
- HERBICIDES
- INSECTICIDES
- FUNGICIDES
- GROWTH REGULATORS
- HUMIC PRODUCTS

The Andersons®

2018

PROFESSIONAL TURF, ORNAMENTAL, AND PRODUCTION NURSERY

DG Pro® | DuoCide® | Prophesy® | Trammel® | Humic DG™ | Black Gypsum DG® | HCU™

We are The Andersons.
DO YOU KNOW ALL WE CAN DO FOR YOU?

The Andersons, Inc. was founded in 1947 in Maumee, Ohio, and is currently a four billion dollar corporation (NASDAQ:ANDE). As a worldwide supplier to the turf industry, The Andersons is a major manufacturer and marketer of patented dispersible granular products such as Contec DG® for putting greens, tees and other fine turf. In addition, The Andersons offers a full line of premium products for several professional markets that include golf courses, sports turf, lawn and landscape, horticulture, and agriculture.

The Andersons pioneered the use of dispersing granule technology combined with carbon rich humates in products like Humic DG™ and Black Gypsum DG®. In 2016, The Andersons launched an innovative approach to foliar fertility with their Foltec® SG line of soluble granular products. In 2017, The Andersons launched HCU™ - Humic Coated Urea, an innovative nitrogen source featuring urea-humate fusion.

The Andersons is an active member of GCSAA, NGF, PLANET, STMA, ITODA, RISE and many other industry organizations. The Andersons, Inc. also includes business groups that serve other markets including Grain, Ethanol and Rail.

For more about The Andersons, visit www.AndersonsPlantNutrient.com.

The Andersons®

And Beyond

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Rates on these products may vary with use.
Consult product label for your particular use.

PRE-EMERGENT HERBICIDES + FERTILIZER

Product	Feature	Typical Rates		Active Ingredient/A	Lbs Nutrient/M			N Sources (%)		K Source	SGN*	Bulk Density	Pkg. Wt.
		Lbs/M	Lbs/A		N	P	K	Amm N	Urea N				
FERTILIZERS WITH BARRICADE® OR PRODIAMINE — AVAILABLE IN BULK BAGS													
19-0-6 APT19UBR5.40	25% Fortify®-N 0.21% Barricade®	4.1	179	0.38 lb prodiamine	0.78	-	0.25	-	19.00	K Chloride	Standard	61.6	50 lb
13-0-0 APT13UBR5.40	25% Fortify®-N 0.28% Barricade®	4.1	179	0.50 lb prodiamine	0.53	-	-	-	13.00	-	Standard	67.4	50 lb
15-0-0 APT15UBR5.40	80% Fortify®-N 0.28% Barricade®	4.1	179	0.50 lb prodiamine	0.62	-	-	-	15.00	-	Standard	65.7	50 lb
12-0-4 ASP121UBPR5	100% Fortify-N 0.38% Prodiamine 16.65% Biosolids	4.5	197	0.75 lb prodiamine	0.54	-	0.18	-	12.00	K Chloride	Standard	64.1	50 lb
18-0-4 APT184BR5.40	25% NS-54™ 0.38% Barricade®	4.0	174	0.66 lb prodiamine	0.72	-	0.16	-	18.00	K Chloride	Standard	62.2	50 lb
25-0-5 APT25BR52.40	0.38% Barricade®	4.0	174	0.66 lb prodiamine	1.00	-	0.20	-	25.00	K Chloride	Standard	59.0	50 lb
0-0-7 APTBR450.1	0.426% Barricade®	4.0	174	0.74 lb prodiamine	-	-	0.28	-	-	K Chloride	Standard	80.9	50 lb
5-5-25 APT5BR50.40	0.426% Barricade®	4.0	174	0.74 lb prodiamine	0.20	0.20	1.00	1.96	3.04	K Chloride	Standard	70.9	50 lb
18-0-4 APT18UBR5.40	25% Fortify®-N 0.426% Barricade®	4.0	174	0.74 lb prodiamine	0.72	-	0.16	-	18.00	K Chloride	Standard	62.8	50 lb
21-3-8 APT215BR5.40	25% NS-54™ 0.426% Barricade®	4.0	174	0.74 lb prodiamine	0.84	0.12	0.32	1.17	19.83	K Chloride	Standard	59.6	50 lb
FERTILIZERS WITH DIMENSION® — AVAILABLE IN BULK BAGS													
13-0-0 APT13UDM5.40	25% Fortify®-N 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.52	-	-	-	13.00	-	Standard	67.1	50 lb
13-0-5 APT13UDM50.40	20% Fortify®-N 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.52	-	0.20	-	13.00	K Chloride	Standard	66.5	50 lb
18-0-4 APT183DM5.40	20% NS-54™ 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.72	-	0.16	-	18.00	K Chloride	Standard	62.4	50 lb
18-0-4 APT184UDM5.40	25% Fortify®-N 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.72	-	0.16	-	18.00	K Chloride	Standard	62.5	50 lb
18-0-4 ASP189UBDM5	50% Fortify-N 0.103% Dimension 16.65% Biosolids	4.0	174	0.18 lb dithiopyr	0.72	-	0.16	-	18.00	K Chloride	150	60.1	50 lb
18-3-7 APT184DM50.40	25% NS-54™ 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.72	0.12	0.28	1.17	16.83	K Chloride	Standard	61.0	50 lb
19-0-0 APT19DM50.40	0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.76	-	-	-	19.00	-	Standard	62.5	50 lb
19-0-0 APT19UDM5.40	25% Fortify®-N 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.76	-	-	-	19.00	-	Standard	62.2	50 lb
19-0-6 APT194DM5.40	25% NS-54™ 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	0.76	-	0.24	-	19.00	K Chloride	Standard	61.3	50 lb
25-0-5 APT256DM50.40	50% NS-54™ 0.103% Dimension®	4.0	174	0.18 lb dithiopyr	1.00	-	0.20	-	25.00	K Chloride	Standard	56.9	50 lb
12-0-4 APT12UDM5.40	40% Fortify®-N 0.125% Dimension®	3.5	152	0.19 lb dithiopyr	0.42	-	0.14	-	12.00	K Chloride	Standard	67.5	50 lb
18-0-4 APT18UDM50.40	25% Fortify®-N 0.125% Dimension®	3.5	152	0.19 lb dithiopyr	0.63	-	0.14	-	18.00	K Chloride	Standard	62.6	50 lb
18-0-9 ASP187DM5.40	40% NS-54™ 0.125% Dimension®	3.5	152	0.19 lb dithiopyr	0.63	-	0.32	-	18.00	K Chloride	Standard	60.0	50 lb
18-0-4 APT183DM50.40	20% NS-54™ 0.164% Dimension®	3.5	152	0.25 lb dithiopyr	0.63	-	0.14	-	18.00	K Chloride	Standard	62.5	50 lb
18-3-12 APT18DM5.40	25% NS-54™ 0.164% Dimension®	3.5	152	0.25 lb dithiopyr	0.63	0.11	0.42	1.17	16.83	K Chloride	150	58.0	50 lb
19-0-0 APT194DM52.40	25% NS-54™ 0.164% Dimension®	3.5	152	0.25 lb dithiopyr	0.67	-	-	-	19.00	-	Standard	62.0	50 lb
19-0-2 APT19DM52.40	0.164% Dimension®	3.5	152	0.25 lb dithiopyr	0.67	-	0.07	-	19.00	K Chloride	Standard	62.7	50 lb
19-0-6 APT194DM50.40	25% NS-54™ 0.164% Dimension®	3.5	152	0.25 lb dithiopyr	0.67	-	0.21	-	19.00	K Chloride	Standard	61.3	50 lb
15-0-10 APT157DM5.40	50% NS-54™ 0.25% Dimension®	3.4	148	0.37 lb dithiopyr	0.51	-	0.34	-	15.00	K Chloride	150	62.0	50 lb
21-0-10 APT21UDM5.40	50% Fortify®-N 0.25% Dimension®	3.4	148	0.37 lb dithiopyr	0.71	-	0.34	-	21.00	K Chloride	Standard	59.0	50 lb

Product	Feature	Typical Rates		Active Ingredient/A	Lbs Nutrient/M			N Sources (%)		K Source	SGN*	Bulk Density	Pkg. Wt.
		Lbs/M	Lbs/A		N	P	K	Amm N	Urea N				
FERTILIZERS WITH PENDIMETHALIN — AVAILABLE IN BULK BAGS													
0-0-7 APTPD5.1	0.86% ProPendi™	4.0	174	1.50 lb pendimethalin	-	-	0.28	-	-	K Chloride	Standard	79.8	50 lb
13-3-7 APT135PD5.40	40% NS-54™ 0.86% ProPendi™	4.0	174	1.50 lb pendimethalin	0.52	0.12	0.28	1.17	11.83	K Chloride	Standard	64.4	50 lb
20-0-4 APT20UPD5.40	30% Fortify®-N 0.86% ProPendi™	4.0	174	1.50 lb pendimethalin	0.80	-	0.16	-	20.00	K Chloride	Standard	61.5	50 lb
22-0-6 APT228PD50.40	40% NS-54™ 0.75% ProPendi™	4.6	200	1.50 lb pendimethalin	1.01	-	0.28	-	22.00	K Chloride	Standard	57.6	50 lb
FERTILIZERS WITH DIMENSION® & ACELEPRYN® — AVAILABLE IN BULK BAGS													
28-0-3 w/ MUtech®-L and Contec DG® ASP282WDA5.40	87% MUtech®-L 0.067% Acelepryn® 0.167% Dimension®	3.4	150	0.10 lb chlorantraniliprole 0.25 lb dithiopyr	0.96	-	0.10	2.03	4.67	SOP	150	48.7	50 lb
0-0-8 with DG Pro® ASPK8DA5.40	0.067% Acelepryn® 0.167% Dimension®	3.4	150	0.10 lb chlorantraniliprole 0.25 lb dithiopyr	-	-	0.28	-	-	SOP	150	49.7	50 lb
FERTILIZERS WITH POST-EMERGENT WEED CONTROL — AVAILABLE IN BULK BAGS													
15-0-8 + Millennium Ultra® APT153ML4.50	25% Poly-S® 0.869% Millennium Ultra®	4.0	174	1.20 lb 2, 4-D 0.12 lb clopyralid 0.12 lb dicamba	0.60	-	0.32	-	15.00	K Chloride	150	51.4	40 lb
16-0-8 + Escalade® APT164ES4.50	25% Poly-S® 1.143% Escalade®	4.0	174	1.51 lb 2, 4-D ester 0.36 lb fluroxypyr ester 0.12 lb dicamba	0.64	-	0.32	-	16.00	K Chloride	150	50.7	40 lb
16-0-9 + Surge® APT164SR4.50	25% Poly-S® 1.434% Surge®	4.0	174	2.01 lb 2, 4-D ester 0.30 lb MCPP 0.13 lb dicamba 0.06 lb sulfentrazone	0.64	-	0.36	-	16.00	K Chloride	150	50.8	40 lb
18-0-5 + LockUp® APT184LD5.40	25% NS-54™ 0.03% LockUp® 0.07% dicamba	4.6	200	0.06 lb penoxsulam 0.14 lb dicamba	0.83	-	0.23	-	18.00	K Chloride	150	42.8	50 lb
19-0-2 + Trimec® APT19WF5.40	0.90% Trimec®	4.0	174	1.20 lb 2, 4-D ester 0.26 lb MCPP 0.10 lb dicamba	0.76	-	0.08	-	19.00	K Chloride	150	49.6	50 lb
22-0-4 + Trimec® APT2250WF4.50	25% NS-54™ 0.72% Trimec®	4.0	174	0.96 lb 2, 4-D ester 0.21 lb MCPP 0.09 lb dicamba	0.88	-	0.16	-	22.00	K Chloride	150	45.5	40 lb

FERTILIZER + DIMENSION® AND ACELEPRYN®

Designed for season long prevention of grassy weeds and control of grubs in one simple application.

- Provides pre-emergent control of crabgrass and other annual weeds and systemic control of white grubs and other insect pests.
- Acelepryn insecticide has been classified as reduced risk by the United States EPA for use on turf.
- Formulated on premium sized 150 SGN dispersing granules (DG) which rapidly disperse into the turf canopy with minimal watering.
- DG formulations are perfect use on close cut turf including, tees, fairways, surrounds, sports turf and high quality residential and commercial properties.

*Standard sizing can range from 215-240 SGN depending on raw material supply and sizing.

HUMIC SUBSTANCES

A POWERFUL TOOL IN TURF MANAGEMENT

Humates, or humic substances, are a naturally occurring, mined material. Similar to coal, humates occur as a result of compression and degradation of ancient deposits of plant and animal remains. The compression and degradation of nutrient-rich materials produces a highly reactive, carbon rich material that is a powerful addition to a turf management program.

Humates make up 60-80% of soil organic matter.[1] Soil organic matter is the organic, carbon-containing component of a soil; this includes living organisms, partially degraded tissue and fully degraded tissue (humates).[1] Soil organic matter is a small portion of the soil, but provides substantial benefit to soil and plants. Soil organic matter provides nutrient holding capacity, water holding capacity and stable aggregates. These properties are particularly beneficial on sandy soils, such as greens.

Humates provide numerous benefits, including:

- Enhanced nutrient efficiency and cation exchange capacity
- Humic acid is highly interactive with nutrients in the soil. It reacts with nutrients through chelation and complexation, which keeps applied nutrients available to the plant.
- Enhanced soil biology
- Humic acid supports microorganisms by giving them food to eat and a habitat. The presence of microorganisms has a positive impact on turf vigor and stress tolerance. Microbes support soil and overall plant health by making nutrients available to plants in the inorganic form.
- Enhanced soil structure, porosity and water holding capacity
- Humic acids physically modify soil structure by binding soil particles together.

Humates are composed of three major fractions: fulvic acids, humic acids, and humins. Each of these fractions has some similar and some unique physical and chemical properties that contribute to their effectiveness and complement fertilizer programs. Our products contain all three forms of humic substances, so the benefits of each are enjoyed.

THE THREE HUMIC FRACTIONS

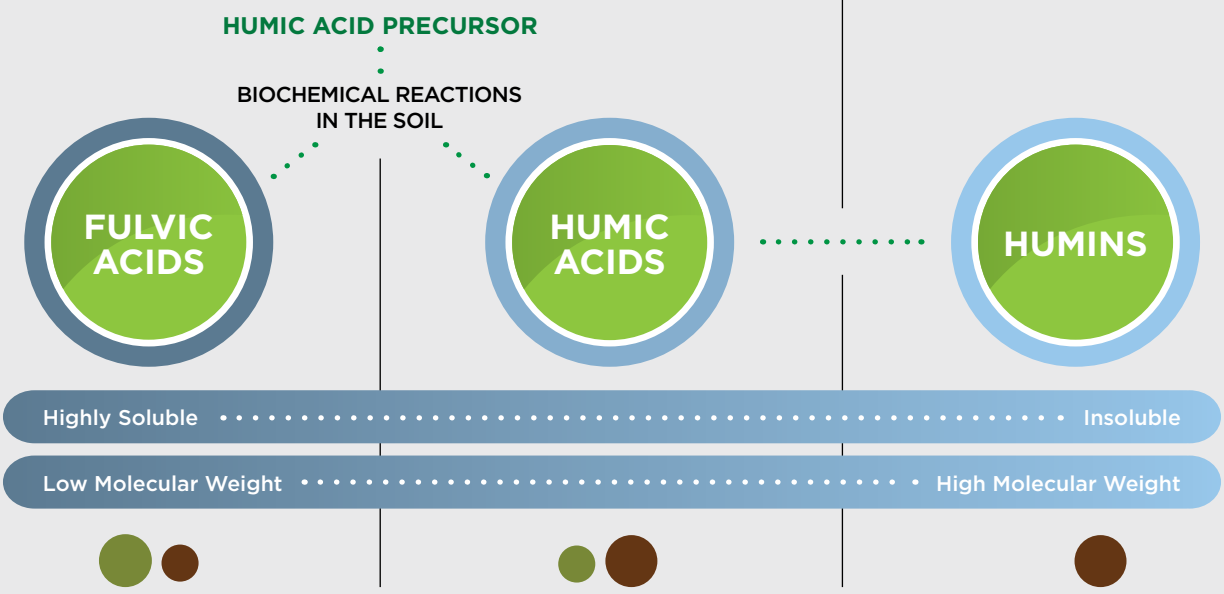
NATURALLY DERIVED BIO-ORGANIC CARBON SOURCES

Foliar Uptake Soil Uptake

FULVIC ACIDS are highly soluble and readily absorbed by leaves, making them well-suited for foliar application. Fulvic acids enhance the absorption of nutrients and the efficiency of plant metabolic reactions.

HUMIC ACIDS are moderately soluble. They have a high cation exchange capacity (CEC), which helps increase a soil's nutrient holding capacity. Humic acid molecules chelate many essential nutrients and help stimulate soil microbiology.

HUMINS are the least soluble form of humic substances. They contain high levels of carbon and have large nutrient holding capacity. Humins persist in soils for very long periods of time.



In addition to the three humic fractions, humic products utilizing The Andersons Dispersing Granule (DG) Technology contain a unique and powerful ingredient we call humic acid precursor. **HUMIC ACID PRECURSOR** contains a soluble form of organic carbon that releases into the soil as DG granules disperse. Through biochemical reactions, it is transformed into humic and fulvic acids, enhancing nutrient uptake and improving soil health.

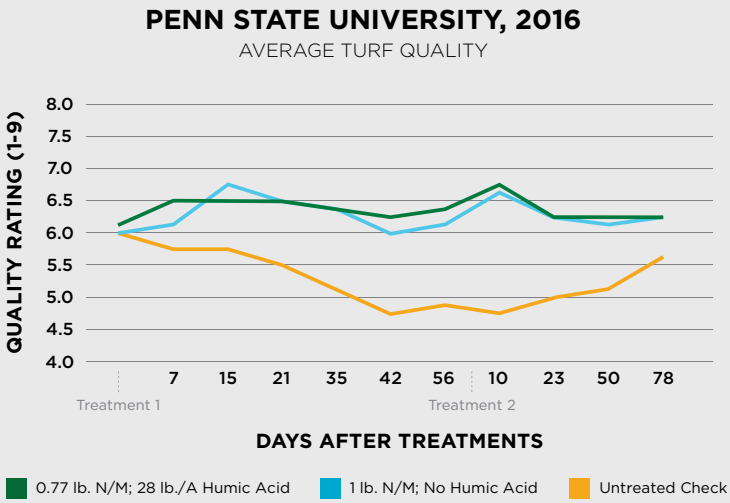
REAL WORLD PERFORMANCE

SAME QUALITY, LESS NUTRIENTS

Numerous research studies conducted by The Andersons and universities around the world have observed the positive impact of humic acid on nutrient efficiency. In studies conducted by Penn State University in 2015 and 2016, The Andersons Humic DG was applied with reduced nitrogen fertility to Kentucky bluegrass at a 3" cut. The Humic DG treatment with reduced nitrogen fertility was compared to a treatment that received the full rate of nitrogen fertility but no Humic DG. For two years in a row, the same turf quality and color were observed throughout the study in plots treated with the full rate of nitrogen (1.00 lb N/1000 ft^2) and plots treated with Humic DG (28 lb/A) and a reduced rate of nitrogen (0.77 lb N/1000 ft^2).

Humic acid has multiple impacts on the plant and soil system that result in enhanced nutrient efficiency.

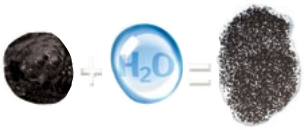
- Humic acid supports microorganisms by giving them food to eat and a habitat. The presence of microorganisms has a positive impact on turf vigor and stress tolerance. Microbes support soil and overall plant health by making nutrients available to plants in the inorganic form.
- Humic acid is highly interactive with nutrients in the soil. It reacts with nutrients through chelation and complexation, which keeps applied nutrients available to the plant.
- Humic acids physically modify soil structure by binding soil particles together. This is desirable because it:
    - increases soil aggregate stability
    - improves water infiltration and aeration
    - increases nutrient availability and holding capacity



THE BENEFITS OF DG TECHNOLOGY

The Andersons Dispersible Granule (DG) technology provides hundreds of thousands of small particles of humic acid that are immediately available to interact within your soil and enhance your nutrient efficiency. DG technology means the humic acid granules won't waste time sitting on top of your turf. After exposure to water, thousands of small humic acid particles will be released and traveling down into your turf where they can start making an impact.

DG technology produces uniform, spherical granules in several SGN sizes. DG technology enables the production of consistently clean, dust free, and easy to handle granules. DG granules can be spread evenly and consistently through all types of application equipment. DG granules are designed to be ultra-dry, which allows for successful blending with all types of dry fertilizers, including urea.



1. Brady, Nyle C, and Ray R Weil. The Nature and Properties of Soils. 14th ed., Pearson Education, 2008.

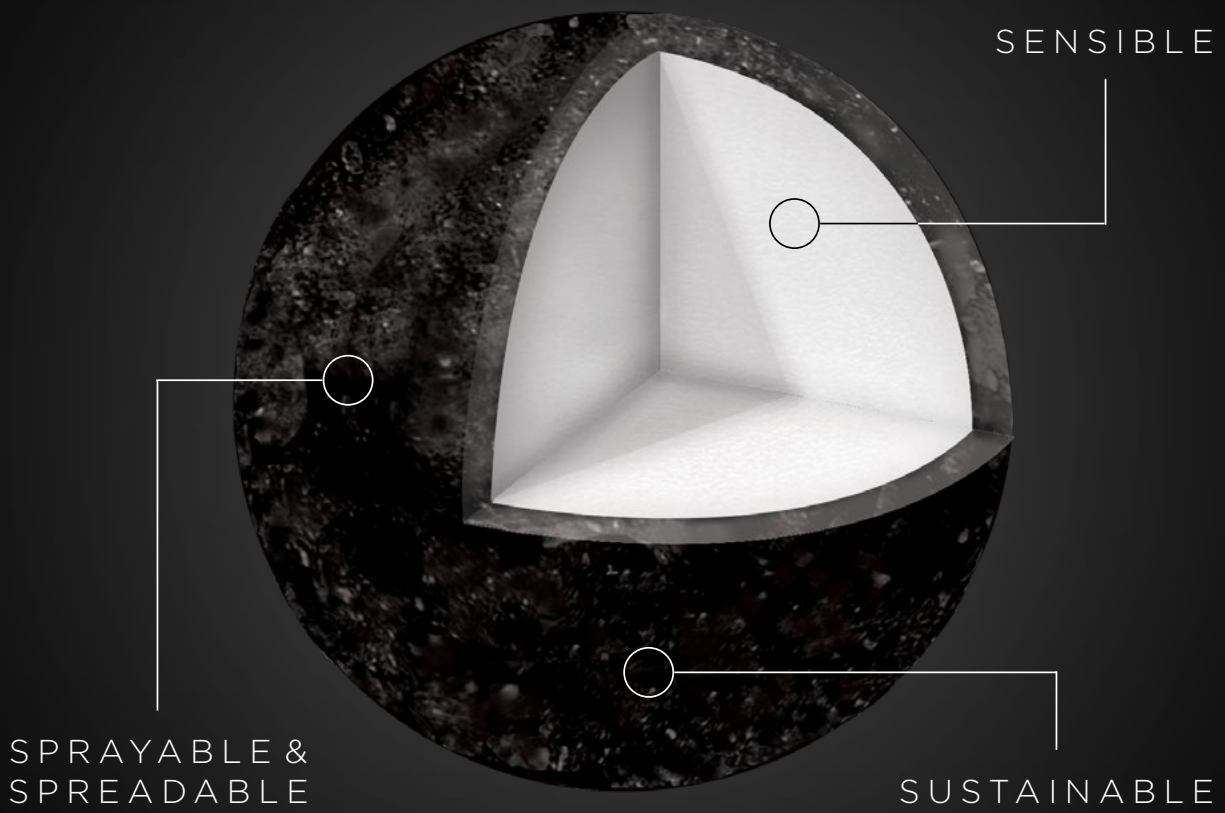
THE ANDERSONS HUMIC PRODUCTS

Product	Form	Application Method	% Humic Acid	Fulvic Acid	Humic Acid	Humin	Humic Acid Precursor
HCU™	Granule	Dry or Liquid Applied	2%	X	X		
Humic DG™	Granule	Dry Applied	70%	X	X	X	X
Black Gypsum DG®	Granule	Dry Applied	10%	X	X	X	X
Black Gypsum DG®	Granule	Dry Applied	21%	X	X	X	X
UltraMate® LQ	Liquid (sulfonated)	Liquid Applied	12%	X	X		

HCU™

HUMIC COATED UREA

- Fulvic Acid
- Humic Acid
- Nitrogen



BLACK IS THE NEW GREEN™

HCU (HUMIC COATED UREA) GRANULES ARE AN INNOVATIVE NITROGEN SOURCE FEATURING UREA-HUMATE FUSION.

This proprietary technology from The Andersons produces a cost effective 44-0-0 nitrogen granule that is bonded with potassium humate. Clean, spherical, free flowing granules are 100% soluble for use in both liquid and dry applications. HCU granules can be applied to all types of cool and warm season turf, landscape and nursery ornamentals, and specialty crops.

HCU granules offer a practical, sensible and sustainable approach to applying nitrogen with important soil and plant health benefits that traditional nitrogen sources cannot provide.

C Carbon

N Nitrogen

GUARANTEED ANALYSIS

Total Nitrogen (N)..... 44.0%

Plant nutrients derived from urea.

NON-PLANT FOOD INGREDIENTS

Active Ingredients
Humic Acid* 2.0%
Total Other Ingredients..... 98.0%

*Derived from humic substances

PRODUCT SPECIFICATIONS

Analysis:	44-0-0
Coating:	2% potassium humate
Particle Size:	215 SGN
UI:	40
Bulk Density:	46 lbs/cu ft
RTA:	90%+
Package Size:	50 lb bag

SENSIBLE

There are many types of controlled-release or enhanced efficiency nitrogen products available that provide the single benefit of potentially improving the utilization of applied nitrogen. Enhanced efficiency fertilizer products use several different methods to impact the release of nutrients. Some enhanced efficiency fertilizers use physical coatings such as polymers and/or sulfur to slow the release of nitrogen. Other enhanced efficiency fertilizers use additives to suppress chemical and/or biological conversions of nitrogen compounds in the soil.

HCU granules are different by design. They utilize urea-humate fusion technology which bonds a uniform coating of certified organic potassium humate over a urea granule. This coating does not act as a physical barrier to slow nitrogen release, but works synergistically with urea to promote and enhance soil biology.

HCU GRANULES CONTAIN BENEFICIAL FULVIC AND HUMIC ACIDS THAT PROVIDE A RICH CARBON SOURCE FOR MAINTAINING AND IMPROVING SOIL BIOLOGY.

HCU granules contain beneficial fulvic and humic acids that provide a rich carbon source for maintaining and improving soil biology. Fulvic and humic acids have numerous proven benefits for soil and plant health which include: enhanced nutrient efficiency, micronutrient uptake, soil nutrient holding capacity, biological activity, and water holding capacity.

Both fulvic and humic acids have unique physical and chemical properties that contribute to their effectiveness and the way they complement fertilizer programs.

SPRAYABLE & SPREADABLE

HCU granules are multipurpose soluble granules that can be solubilized for spray application or dry applied through typical dry spreading equipment. HCU 44-0-0 granules are a cost effective nitrogen source, and are well suited for use on large turf applications such as golf course tees, aprons, fairways and roughs, sports fields, commercial and residential lawns, ornamentals, and specialty crops.

SPRAY APPLICATION RATES

NITROGEN RATE	PRODUCT		HUMIC ACID*	SUGGESTED MIN. SPRAY VOLUME
N / 1000 FT²	LBS./1000 FT²	LBS. / ACRE	LBS. / ACRE	GAL. / ACRE
0.10	0.23	10	0.20	30
0.25	0.57	25	0.50	40
0.33	0.75	33	0.70	40
0.50	1.14	50	1.00	40
0.75	1.70	74	1.50	60
1.00	2.27	99	2.00	80

BROADCAST APPLICATION RATES

NITROGEN RATE	PRODUCT		HUMIC ACID*
N / 1000 FT²	LBS. /1000 FT²	LBS. / ACRE	LBS. / ACRE
0.75	1.70	74	1.50
1.00	2.27	99	2.00
1.25	2.84	124	2.50
1.50	3.41	149	3.00

**Equivalent to gallons/acre rate of 12% liquid humic acid.*

SPRAY APPLICATION

HCU granules completely solubilize when added to water and can be spray applied at nitrogen rates of 0.10 - 1.00 lbs. N/1,000 ft². To mix HCU granules for spray application, refer to the label for application rates, water volume, dilution, and mixing instructions. HCU granules can be mixed and added to the spray tank using industry standard practices including: pouring into the strainer basket at the top tank opening and running water over the granules to solubilize, preparing a bucket slurry mixture, adding granules through the spray tank inductor system, or preparing a solution in a mix batch tank system. The time required to solubilize HCU granules is reduced by using warm or hot water. HCU granules are compatible with the most widely used control products for finely maintained cool and warm season turf. For more details, visit DiscoverHCU.com.

DRY SPREAD APPLICATION

Urea-humate fusion technology produces a clean, dry, dust-free, spherical HCU granule that is ideal for dry spread application. HCU granules can be applied through all types of granular spreading equipment including The Andersons Professional rotary spreaders, and larger scale broadcast spreaders such as Lely and Vicon models. Typical application rates range from 0.75 – 1.50 lbs N/1000 ft².

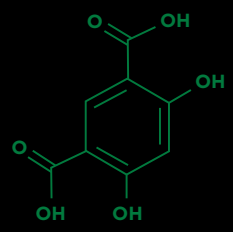
SUSTAINABLE

"Humic substances are recognized by most soil scientists and agronomists as the most important component of a healthy, fertile soil."[1]

Humic acid provides a carbon food source which stimulates soil microbiology. Carbon is an essential plant nutrient that provides soil microbes with a food source and habitat. Microbes support soil and overall plant health by making nutrients available to plants in the inorganic form. Humic acid is a primary food source to grow populations of beneficial soil fungi, including mycorrhizal fungi.

The complex structure of humic acids enables many opportunities for interactions with nutrients. These interactions keep nutrients accessible to the growing plants and prevent leaching or tie up. Humic acid is an environmentally sustainable addition to your nutrition program, as it allows the same quality and color to be enjoyed while applying less nutrients—**Black is the New Green**. Humic acids also increase the availability of micronutrients to the plant. Larger molecules of humic acids physically modify soil structure which increases soil aggregate stability, improves water infiltration, nutrient holding capacity, aeration, soil tilth, and workability.

1 Pettit, R.E. 2004. Organic Matter, Humus, Humate, Humic Acid, Fulvic Acid and Humin: Their Importance in Soil Fertility and Plant Health.



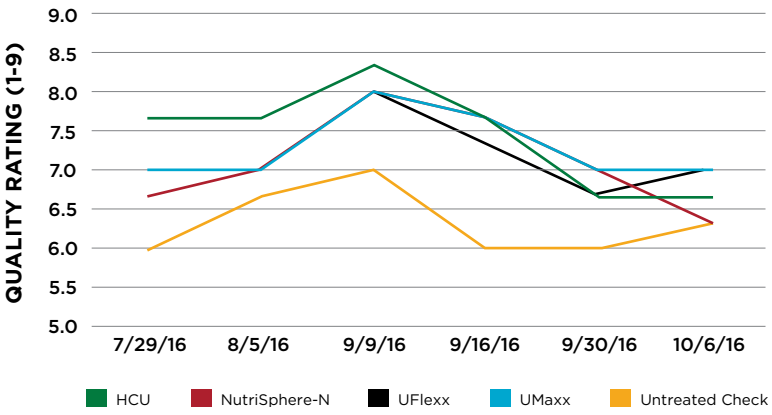
ENHANCE SOIL BIOLOGY

With the power of humic acid, HCU granules will enhance soil biology and chemistry, which in turn will enhance nutrient availability. This is in contrast to many competitive products, which keep nutrients available by suppressing biological processes.

PROVEN PERFORMANCE

UNIVERSITY OF ARKANSAS, 2016

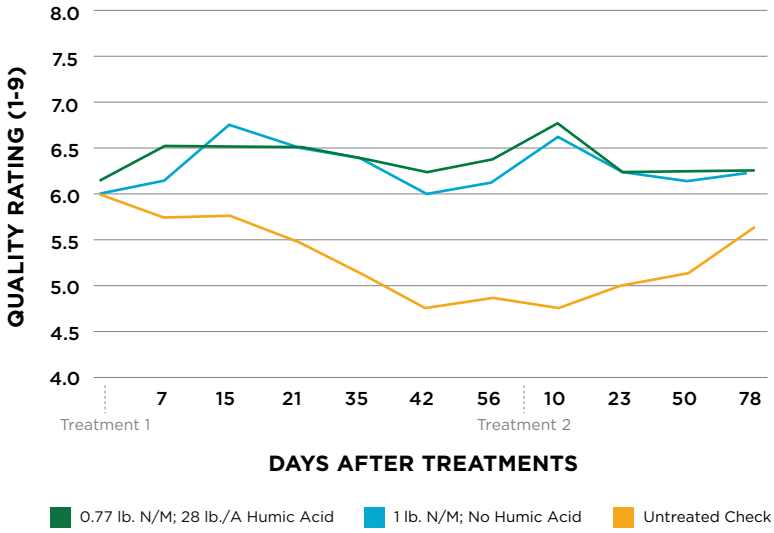
TURF QUALITY & COLOR



HCU granules provide turf quality and color that is comparable to current industry leading products. In a study conducted on Bermudagrass at the University of Arkansas, HCU granules were applied at a rate of 1.00 lb N/1000 ft² and compared to NutriSphere-N, UMaxx, and UFlexx applied at the same rate. The Bermudagrass plots treated with HCU granules had turf quality and color statistically similar or greater than industry leading products for the 11 week duration of the study. Similar results were observed on Kentucky bluegrass at Penn State University.

PENN STATE UNIVERSITY, 2016

TURF QUALITY & COLOR



Numerous research studies conducted by The Andersons and universities around the world have observed the positive impact of humic acid on nutrient efficiency. In studies conducted at Penn State University in 2015 and 2016, The Andersons humic acid was applied with reduced nitrogen fertility to Kentucky bluegrass at a 3" cut. These humic acid treatments with reduced nitrogen fertility were compared to a treatment that received the full rate of nitrogen fertility but no humic acid. For two years in a row, the same turf quality and color were observed throughout the study in plots treated with the full rate of nitrogen (1.00 lb N/1000 ft²) and plots treated with humic acid (28 lb humic acid/acre) and a reduced rate of nitrogen (0.77 lb N/1000 ft²).

"HCU is a great product. Tank mixing has been easy with no problems. Gives a great green up response. I would definitely recommend this product to other Supers."

Shawn Cooper, Superintendent
White Deer Golf Course | Montgomery, PA

Humic DG™

Humic DG granules contain 70% humic acid and 10% humic acid precursor. DG Technology creates a dust free, spherical, ultra dry particle that rapidly disperses into thousands of microparticles upon contact with moisture. Humic DG granules' increased surface area, when compared to screened humate, creates greater availability to the plant. It performs in a wide range of conditions and soil types, independent of application method, and features dual carbon sources that are unique to The Andersons granular humic products. Humic DG contains the full spectrum of humic substances: fulvic acid, humic acid, and humin, as well as humic acid precursor.

OMRI LISTED For Organic Use

FEATURES & BENEFITS

- Flexible application allows for use as a stand alone product or in blends with granular fertilizers
- 4X more efficient than screened humate
- Enhances nitrogen and phosphorus efficiency
- Promotes good soil structure and increases water holding capacity
- Enhances root system development
- Easy to handle and spread through all types of application equipment
- Economical application cost per acre compared to liquid and screened humates

PRODUCT SPECIFICATIONS

Product Type:	Dispersing granule humic acid
Humic Acid Content:	70% (A&L method)
Humic Acid Precursor Content:	10%
Particle Size:	240 SGN
Moisture Content:	7 - 9%
Bulk Density:	43 - 45 lbs/cu ft
RTA:	90%+
Package Size:	40 lb poly bag 2,000 lb bulk bag
Typical Rate:	40 - 200 lbs/acre

Black Gypsum DG®

Black Gypsum DG granules are homogenous and combine natural gypsum and humic substances to form a unique bio-amendment. DG Technology creates a dust-free, spherical, ultra-dry granule that rapidly disperses into thousands of microparticles upon contact with moisture. These microparticles deliver calcium, sulfur, and carbon directly into the soil.

OMRI LISTED For Organic Use

FEATURES & BENEFITS

- Available in two formulations: 10% humic acid (BGDG 10) and 21% humic acid (BGDG 21)
- Contains calcium sulfate dihydrate ($CaSO_4 \cdot 2H_2O$)
  - » Water soluble
  - » Increases calcium and sulfur without changing soil pH
- Humic acid from oxidized lignite (leonardite)
- Improves root development, nutrient uptake, and phosphorus stability
- Provides secondary nutrients (calcium and sulfur)
- Enhances soil health by stimulating soil microbial populations and relieving compaction and salinity
- Blends with fertilizer or can be used alone

PRODUCT SPECIFICATIONS

Product Type:	Dispersing granule humic acid
Humic Acid Content:	**BGDG 10:** 10% (A&L method) **BGDG 21:** 21% (A&L method)
Humic Acid Precursor Content:	**BGDG 10:** 3% | **BGDG 21:** 12%
Gypsum Content:	**BGDG 10:** 80% | **BGDG 21:** 60%
Particle Size:	240 SGN
Moisture Content:	3-7%
Bulk Density:	800 kg/m³
RTA:	90%+
Package Size:	20 kg poly bag
Typical Rate:	150-600 kg/ha

UltraMate® LQ

UltraMate LQ liquid humate is a sulfonated potassium formulation. It forms a complete solution when added directly to liquid fertilizer, micronutrient, or pesticide formulations over a wide range of pH values. UltraMate LQ liquid humate is highly compatible, allowing application methods which are unacceptable for conventional humic products, including tank mixing and drip irrigation. UltraMate LQ liquid humate allows plants to utilize applied N, P, and micronutrients more efficiently, reducing leaching and improving soil structure.

FEATURES & BENEFITS

- Stabilizes nitrogen, reducing volatility while increasing utilization
- Increases seed germination and nutrient availability
- Promotes phosphorus utilization and decreases leaching
- Mixes easily and stores well in totes and mixes
- Compatible with liquid fertilizer, micronutrient or pesticide formulations
- Up-front availability of humic and fulvic acids
- Wide range of pH compatibility: 2 - 12
- Wide range of application methods: foliar spray and soil application

PRODUCT SPECIFICATIONS

Product Type:	Liquid humic acid
Humic Acid Content:	12% (A&L method)
pH:	8.0 - 10.0
Specific Gravity:	1.08 @ 68°F
Density:	9.0 lbs/gal
Equilibrium Temp:	32°F
Package Size:	2 x 2.5 gallon
Typical Rate:	1 - 1.5 gallons/acre

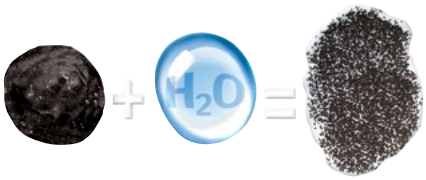
HUMIC PRODUCTS

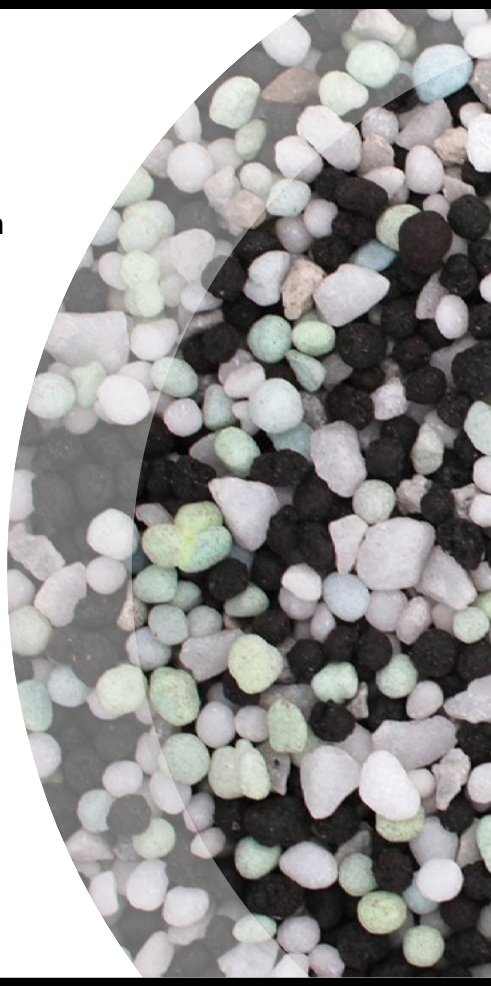
Product	Humic Acid Content (A&L Method)	Analysis (%)				SGN	Use Rates on Turf (per acre)	Pkg. Wt.
		Calcium Sulfate Dihydrate ($CaSO_4 \cdot 2H_2O$)	Calcium (Ca)	Sulfur (S)	Soluble Potash (K_2O)			
Humic DG™ ASPHUDGGRN4	70%	-	-	-	-	75	40 - 200 lbs	40 lb
Humic DG™ ASPHUDG40	70%	-	-	-	-	240	40 - 200 lbs	40 lb
Black Gypsum DG® ASPGY10HUDG5	10%	70.0	17.0	13.0	-	240	130 - 520 lbs	50 lb
Black Gypsum DG® ASPGYHUDG5	21%	48.0	12.0	8.9	-	240	130 - 520 lbs	50 lb
UltraMate® LQ AG14010W	12%	-	-	1.0	3.0	N/A	1 - 1.5 gal	2 x 2.5 gal case

FERTILIZER WITH HUMIC

These unique fertilizer blends containing humic granules provide uniform growth, extended nitrogen feeding and enhanced nutrient uptake.

- Humic DG and Black Gypsum DG contain humic acid, fulvic acid, humin, and humic acid precursors. These organic acids enhance the plant's ability to take in essential nutrients and improve soil structure.
- Uniform, dry, free flowing products that are easy to apply.
- Products utilize one of the following nitrogen sources from The Andersons:
  - NS-54™ coated slow release nitrogen
  - MUtech® methylene urea
  - MUtech-L long term release methylene urea
  - HCU™ (Humic Coated Urea)





FERTILIZER WITH HUMIC

HUMIC DG™

Product	Feature	SGN*	Typical Rates			Sources		Other Nutrients (%)							Density	Pkg. Wt.
			Products Lbs/M	Nutrients Lbs/M	Humic DG Lbs/Acre	P	K	Fe	Mg	Mn	Cu	Zn	Ca	S		
13-0-3 + 11.5% Humic DG™ ASP133HU5.40	53% BioSolids 25% NS-54™ 11.5% Humic DG™	Standard	4.0	0.52 N	20.0	-	KCl	1.1	-	-	-	-	1.6	4.4	48.8	50 lb
18-0-7 + 20% Humic DG™ ASP189HU5.40	50% NS-54™ 20% Humic DG™	Standard	4.6	0.55 N	40.0	-	SOP	-	-	-	-	-	-	2.3	54.0	50 lb

BLACK GYPSUM DG® & HCU™

Product	Feature	SGN*	Typical Rates			Sources		Other Nutrients (%)							Density	Pkg. Wt.
			Products Lbs/M	Nutrients Lbs/M	Black Gypsum DG Lbs/Acre	P	K	Fe	Mg	Mn	Cu	Zn	Ca	S		
22-0-4 with 50% HCU™ + 43% Black Gypsum DG® ASP22HCUBG5	50% of N from HCU™ 43% Black Gypsum DG®	Standard	4.0	0.88 N	74.0	-	SOP	-	-	-	-	-	7.2	6.9	49.3	50 lb

*Standard sizing can range from 215-240 SGN depending on raw material supply and sizing.

LCO-1000™ SPREADER

NEW!

PRODUCT CODE	ASPLCO1000
DESCRIPTION	LCO-1000™ Spreader
HOPPER CAPACITY	80 lbs (36.29 kg)
NET WEIGHT	36 lbs (16.33 kg)
PALLET COUNT	8 spreaders/pallet

- Durable, stainless steel frame
- Includes hopper cover
- Limited lifetime gear warranty
- Four total grease zerks for easy lubrication
- Quick open gear housing - No tools required
- 21” wheel base is wider than most, providing added stability
- Unique dual rate setting mechanism accommodates both The Andersons and JDL High Wheel settings
- Optional side deflector kit available (Code - SDSHIELDLCO)

MODEL 2000™ PROFESSIONAL ROTARY SPREADER

- Utilizes patented “Helical Cone” technology for superior spread pattern
- Extra-large hopper capacity
- Extended handle
- Heavy duty frame tubing for extra rigidity
- 13” turf saver pneumatic tires
- Integrated front lift handle

MODEL 2000 SR™ PROFESSIONAL ROTARY SPREADER

- Utilizes patented “Helical Cone” technology for a superior spread pattern
- Includes side deflector shield and port shut-off for limiting spread pattern
- Heavy duty stainless steel frame tubing resists corrosion and adds rigidity
- Extra-large hopper capacity
- Extended handle
- 13” turf saver pneumatic tires
- Integrated front lift handle

EXCLUSIVE HELICAL CONE TECHNOLOGY

The Andersons Model 2000 and Model 2000 SR professional spreaders include our innovative helical cone technology. The helical cone, located above the impeller, can be adjusted to place the fertilizer at the correct location on the impeller to provide an even spread pattern. The helical cone allows for even spreading of all sizes of fertilizer granules, and it is only available from The Andersons.

PRIZELAWN® ARC 1 ACCURATE CALIBRATOR

The Prizelawn Calibrator attaches to the spreader and collects granular materials or seeds, which can then be easily removed for weighing to determine the accuracy of the spreader setting with a given product. The ARC 1 Calibrator will fit most professional rotary spreaders.

TURF FERTILIZERS

Product	Feature	Typical Rates		Lbs Nutrient/M			N Sources (%)		K Source	Other	SGN*	Density	Pkg. Wt.
		Lbs/M	Lbs/A	N	P	K	Amm N	Urea N					
FERTILIZERS WITH NS-54™ CONTROLLED RELEASE NITROGEN — AVAILABLE IN BULK BAGS													
5-0-31 APT5151.40	20% NS-54™	3.0	131	0.15	-	0.93	-	5.00	K Chloride	10% Fe	Standard	73.3	50 lb
16-4-8 APT16425.40	40% NS-54™	4.5	196	0.72	0.18	0.36	1.56	14.44	K Chloride	2% Fe	Standard	62.3	50 lb
18-24-12 APT1845.40	25% NS-54™	4.2	183	0.76	1.01	0.50	9.39	8.61	K Chloride	-	Standard	58.0	50 lb
18-24-12 APT18850.40	48% NS-54™	4.2	183	0.76	1.01	0.50	9.40	8.60	K Chloride	-	Standard	57.8	50 lb
24-0-11 APT2412M5.40	50% NS-54™	4.2	183	1.01	-	0.46	-	24.00	K Chloride	2% Fe 1% Mn	Standard	56.0	50 lb
24-5-11 APT2455.40	50% NS-54™	4.2	183	1.01	0.21	0.46	1.96	22.04	K Chloride	3% Fe	Standard	56.7	50 lb
25-0-3 APT2551.40	N/A	4.0	174	1.00	-	0.12	-	25.00	K Chloride	-	Standard	57.8	50 lb
25-0-3 APT25651.40	25% NS-54™	4.0	174	1.00	-	0.12	-	25.00	K Chloride	-	Standard	57.7	50 lb
25-5-12 APT2512M50.40	50% NS-54™	4.0	174	1.00	0.20	0.48	1.96	23.04	K Chloride	2% Fe Micros	Standard	54.7	50 lb
28-2-3 APT28705.40	25% NS-54™	3.6	157	1.01	0.07	0.11	0.78	27.22	K Chloride	-	Standard	54.2	50 lb
28-3-10 APT281M5.40	50% NS-54™	3.6	157	1.01	0.11	0.36	1.17	26.83	KCl/K Sulfate	Micros	Standard	53.0	50 lb
28-3-10 APT282650.40	96% NS-54™	3.6	157	1.01	0.11	0.36	1.17	26.83	K Chloride	-	Standard	49.8	50 lb
30-0-6 APT3075.40	25% NS-54™	3.4	148	1.02	-	0.20	-	26.83	K Chloride	-	Standard	53.2	50 lb
30-0-10 APT30125.40	40% NS-54™	3.4	148	1.02	-	0.34	-	30.00	K Chloride	-	Standard	53.4	50 lb
30-3-6 APT3035.40	N/A	3.4	148	1.02	0.10	0.20	1.17	28.83	K Chloride	-	Standard	54.0	50 lb
30-3-9 APT301FE50.40	50% NS-54™	3.4	148	1.02	0.10	0.31	1.17	28.83	K Chloride	2% Fe	Standard	51.7	50 lb
32-3-10 APT32655.40	20% NS-54™	3.2	139	1.02	0.10	0.32	1.17	30.83	K Chloride	-	Standard	51.6	50 lb
FERTILIZERS WITH FORTIFY®-N, NUTRISPHERE-N® (NSN) AND/OR AVAIL® — AVAILABLE IN BULK BAGS													
15-0-15 APT15UFE5.40	50% Fortify®-N	3.3	144	0.50	-	0.50	-	15.00	K Chloride	3% Fe	Standard	50.5	50 lb
18-0-7 APT18U5.40	40% Fortify®-N	4.1	179	0.74	-	0.29	-	18.00	K Chloride	-	Standard	62.0	50 lb
18-12-6 APT184AP5.40	25% Fortify®-N with AVAIL®	4.1	179	0.74	0.49	0.25	4.69	13.31	K Chloride	AVAIL®	Standard	58.6	50 lb
21-0-21 APT21NFE5.40	75% NSN	3.5	152	0.74	-	0.74	-	21.00	K Chloride	2% Fe	Standard	58.6	50 lb
21-14-7 APT21UAP5.40	50% Fortify®-N with AVAIL®	3.5	152	0.74	0.49	0.25	5.48	15.52	K Chloride	AVAIL®	Standard	56.9	50 lb
22-0-3 APT22UM5.40	50% Fortify®-N	3.4	148	0.75	-	0.10	-	22.00	K Chloride	2% Fe 2% Mg	Standard	60.0	50 lb
24-0-8 APT241UFE5.40	50% Fortify®-N	4.2	183	1.01	-	0.34	-	24.00	K Chloride	2% Fe	Standard	58.4	50 lb

Product	Feature	Typical Rates		Lbs Nutrient/M			N Sources (%)		K Source	Other	SGN*	Density	Pkg. Wt.
		Lbs/M	Lbs/A	N	P	K	Amm N	Urea N					
FERTILIZERS WITH NUTRISPHERE-N® (NSN) AND/OR AVAIL® (CONTINUED) — AVAILABLE IN BULK BAGS													
25-0-3 APT25UFE5.40	50% Fortify®-N	4.0	174	1.00	-	0.12	-	25.00	K Chloride	2% Fe	Standard	59.4	50 lb
25-0-3 APT25U5.40	50% Fortify®-N	4.0	174	1.00	-	0.12	-	25.00	K Chloride	-	Standard	57.8	50 lb
30-0-10 APT30NFE5.40	100% NSN	3.4	148	1.02	-	0.34	-	30.00	K Chloride	4% Fe	Standard	54.6	50 lb
30-0-4 APT30U5.40	50% Fortify®-N	3.4	148	1.02	-	0.14	-	30.00	K Chloride	-	Standard	54.2	50 lb
32-0-4 APT32UFE5.40	50% Fortify®-N	3.2	139	1.02	-	0.13	-	32.00	K Chloride	2% Fe	Standard	53.5	50 lb
32-0-8 APT321UFE5.40	50% Fortify®-N	3.2	139	1.02	-	0.26	-	32.00	K Chloride	2% Fe	Standard	53.2	50 lb
33-0-5 APT33NFE5.40	100% NSN	3.1	135	1.02	-	0.16	-	33.00	K Chloride	2% Fe	Standard	52.7	50 lb
45-0-0 APT455.40	100% NSN	3.4	148	1.53	-	-	-	45.00	-	-	Standard	47.0	50 lb
46-0-0 APT4651.40	100% NSN	3.3	144	1.52	-	-	-	46.00	-	-	Standard	47.0	50 lb

Product	Feature	Typical Rates		Active Ingredient/A	Lbs Nutrient/M			N Sources (%)		K Source	SGN*	Density	Pkg. Wt.
		Lbs/M	Lbs/A		N	P	K	Amm N	Urea N				
TURF INSECTICIDES — AVAILABLE IN BULK BAGS													
0-0-8 + Merit® APTK8MR5.1	0.20% Merit®	3.5	152	0.30 lb imidacloprid	-	-	0.28	-	-	K Chloride	Standard	78.4	50 lb
15-0-4 + Merit® ASP15UMR5.40	25% Fortify®-N 0.20% Merit®	3.5	152	0.30 lb imidacloprid	0.53	-	0.14	-	15.00	K Chloride	Standard	63.9	50 lb
19-0-2 + Merit® APT19MR5.40	0.20% Merit®	3.5	152	0.30 lb imidacloprid	0.67	-	0.07	-	19.00	K Chloride	Standard	61.3	50 lb
21-0-4 + Merit® ASP21UMR5.40	50% Fortify®-N 0.20% Merit®	3.5	152	0.30 lb imidacloprid	0.74	-	0.14	-	21.00	K Chloride	Standard	59.1	50 lb
30-0-4 + Merit® ASP30UMR5.40	50% Fortify®-N 0.20% Merit®	3.5	152	0.30 lb imidacloprid	1.05	-	0.14	-	30.00	K Chloride	Standard	53.6	50 lb
18-0-5 + Allectus® APT187AL5.40	40% NS-54™ 0.225% Allectus®	4.6	200	0.25 lb imidacloprid 0.20 lb bifenthrin	0.83	-	0.23	-	18.00	K Chloride	Standard	61.5	50 lb
21-0-7 + Allectus® APT218AL50.40	40% NS-54™ 0.225% Allectus®	4.6	200	0.25 lb imidacloprid 0.20 lb bifenthrin	0.97	-	0.32	-	21.00	K Chloride	Standard	57.9	50 lb
0-0-7 + Acelepryn® ASPK7AC5.1	0.067% Acelepryn®	3.4	148	0.10 lb chlorantraniliprole	-	-	0.24	-	-	K Chloride	Standard	80.8	50 lb
15-0-5 + Acelepryn® ASP15UAC5.40	50% Fortify®-N 0.067% Acelepryn®	3.4	148	0.10 lb chlorantraniliprole	0.51	-	0.17	-	15.00	K Chloride	Standard	65.2	50 lb
22-0-7 + Acelepryn® ASP221AC51.40	50% NS-54™ 0.067% Acelepryn®	3.4	148	0.10 lb chlorantraniliprole	0.75	-	0.24	-	22.00	K Chloride	Standard	59.3	50 lb
26-0-6 + Acelepryn® ASP269WAC5.40	0.067% Acelepryn® 92% MUTech®-L	3.4	148	0.10 lb chlorantraniliprole	0.88	-	0.20	2.0	3.03	SOP	150	50.2	50 lb
0-0-3 + ProSect® APTBF50.40	0.058% ProSect®	4.0	174	0.10 lb bifenthrin	-	-	0.12	-	-	K Chloride	150	67.5	50 lb
22-0-6 + ProSect® APT226BF5.40	30% NS-54™ 0.058% ProSect®	4.0	174	0.10 lb bifenthrin	0.88	-	0.24	-	22.00	K Chloride	Standard	58.7	50 lb

*Standard sizing can range from 215-240 SGN depending on raw material supply and sizing.

Product	DG	Typical Rates Lbs/M	Typical Rates Lbs/A	Active Ingredient/A	Field Grown	Container	Landscape	Turf	SGN*	Density	Pkg. Wt.
PRE-EMERGENT HERBICIDES											
0.48% Barricade® DG APTDG48BR5.40	•	3.5	152	0.73 lb prodiamine	•	•	•	•	150	44.8	50 lb
0.25% Dimension® DG SGN 150 APTDG25DM5.40	•	3.4	148	0.37 lb dithiopyr	•	•	•	•	150	46.3	50 lb
2.5% Balan® DG APTDG25B4.2	•	1.8	80	2.00 lb benefin				•	150	69.8	40 lb
2% Team® DG APTDGT24.2	•	2.3	100	1.33 lb benefin 0.67 lb trifluralin				•	150	68.8	40 lb
5% Treflan® DG APTDG5TF4.4	•	1.8	80	4.0 lb trifluralin	•		•		150	70.8	40 lb
5% Trammel® DG APTGL5TN4.1	•	1.8	80	4.0 lb trifluralin	•		•		150	48.4	40 lb
Snapshot™ DG AGLSNAPDG.1	•	3.4	150	3.0 lb trifluralin 0.75 lb isoxaben	•	•	•		100	47.3	25 lb
1.71% Pendimethalin DG APT8637.4	•	2.0	88	1.50 lb pendimethalin	•	•	•	•	100	45.5	40 lb
SPECIALTY PRE-EMERGENT HERBICIDES FOR SEEDING											
3.5% Siduron 12-24-12 APTC12S35.1		3.3	144	5.03 lb siduron				•	Standard	52.7	50 lb
0.08% Mesotrione 21-22-4 ASP21WMSFE4		4.3	187	0.15 lb mesotrione				•	125	40.0	50 lb
INSECTICIDES											
0.2% GrubOut® DG APTDGGB40.2	•	3.5	152	0.30 lb imidacloprid	•	•	•	•	150	46.0	40 lb
0.15% ProSect® on DG Pro® APTDGBF5.40	•	1.5	66	0.10 lb bifenthrin				•	150	46.6	50 lb
DuoCide® Insect Control on DG Pro® APTDGDU4	•	4.0	174	4.00 lb carbaryl 0.10 lb bifenthrin			•	•	150	47.0	40 lb
8% Carbaryl on DG Pro® APT8CR5.40	•	2.4	105	8.36 lb carbaryl	•		•	•	150	42.2	50 lb

DG PRO®

DISPERSING GRANULE CARRIER

Disperses into soil and mulch quickly with no particle run-off or visibility after being watered in.

DUOCIDE® | GrubOut DG | PROPHESY® | TRAMMEL®

Product	DG	Typical Rates		Active Ingredient/A	Field Grown	Container	Landscape	Turf	SGN*	Density	Pkg. Wt.
		Lbs/M	Lbs/A								
FUNGICIDES & GROWTH REGULATORS											
Prophesy® 0.72G Fungicide on DG Pro® APTDGPZ2	•	2.5	109	0.78 lb propiconazole				•	100	47.3	25 lb
3336 Granular Fungicide on DG Pro® CLETP3PRO	•	3.0	131	2.72 lb thiophante-methyl	•	•	•	•	150	46.6	30 lb
Governor® G ASPGR34		1.7 - 5.2	74 - 226	0.11 - 0.34 lb trinexepac-ethyl				•	75	46.6	34 lb

Product	Feature	Other Nutrients (%)							Field Grown	Container	Landscape	Turf	SGN*	Density	Pkg. Wt.
		Fe	Mg	Mn	Cu	Zn	Ca	S							
SPECIALTY FERTILIZERS															
A-TEP ASP83296.40	Hi-Mag Trace Element Pkg.	8.0	12.0	3.0	0.5	1.0	-	9.0	•	•	•	•	100	67.0	50 lb
7-1-2 Innova Organic ASP7W4	Organic fertilizer with amino acids	-	-	-	-	-	-	-	•		•	•	Standard	31.0	40 lb
12-6-6 / 100% MUtech® ASP121WM5.40	3-4 Month Release**	0.13	0.06	-	-	-	1.8	2.0	•	•	•	•	Standard	64.2	50 lb
14-7-7 / 50% MUtech® APT14W5.40	3-4 Month Release**	2.0	-	0.1	0.1	0.1	-	2.4	•		•	•	Standard	63.8	50 lb
14-14-14 / 61% NS-54™ APT1485.40	2-3 Month Release**	1.0	-	0.1	0.1	0.1	-	5.5	•		•	•	Standard	62.8	50 lb
18-6-12 / 83% MUtech®-XL ASP181WM5.40	8-9 Month Release**	1.0	0.5	0.1	0.1	0.1	-	4.2	•	•	•	•	Standard	59.0	50 lb

Product	Typical Rates			N Sources (%)			Sources		Other Nutrients (%)							SGN*	Density	Pkg. Wt.
	Lbs/M	Lbs/A	Lb N/M	Urea N	Amm N	Nitrate N	P	K	Fe	Mg	Mn	Cu	Zn	Mo	B			
WATER SOLUBLE FERTILIZERS																		
28-5-18 AGC84528	1.1	48	0.31	23.7	-	4.3	K Phosphate	K Nitrate	0.10	-	0.05	0.07	0.05	0.0005	0.02	N/A	50.0	25 lb

Product	Comments	SGN*	Density	Pkg. Wt.
SOIL ENHANCERS				
Humic DG™ ASPHUDG40	Humic DG combines pure dry humate with The Andersons DG Technology, creating a spherical granule consisting of thousands of tiny humic acid sub-particles. Humic DG can restore the natural balance in soil necessary for optimal plant growth. Humic DG can increase root growth, chlorophyll content and nutrient uptake, resulting in improved plant quality and hardiness. OMRI Listed.	240	43.0	40 lb
Black Gypsum DG® ASPGYHUDG5	A homogenous dispersing granule (DG) containing a combination of gypsum, humate and humic acid precursor. Black Gypsum delivers calcium, sulfur, and humate directly to the soil utilizing DG Technology. Gypsum acts as a soil conditioner, loosening hard packed soils and enhancing the flushing of harmful salts and excess sodium.	240	49.0	50 lb
DG Lime™ AGCDGLIME5.40	High quality dolomitic limestone formulated in SGN 100 dispersible granules (DG). Provides calcium and magnesium which are essential for plant growth. Neutralizes acidic soils.	100	69.8	50 lb
DG Gypsum™ AGCDGGYP50.40	High quality mined gypsum formulated in a SGN 100 dispersible granule (DG). Provides calcium and sulfur which are essential for plant growth. Lessens hard packed saline-sodic soils.	100	53.0	50 lb
NutraLime® DG Hi-Mag Lime - pelletized RS/LIME5056	NutraLime® DG pelletized lime (calcitic limestone) provides quick pH adjustments which promote better nutrient and pesticide efficiencies. Contains 30% calcium.	Standard	70.0	50 lb
NutraSoft® DG Gypsum - pelletized RS/GYPSUM70	NutraSoft® DG pelletized gypsum (calcium sulfate) supplies calcium and sulfur, lessens soil compaction, increases water penetration and displaces sodium in high salt soils. Contains 21% calcium and 16% sulfur.	Standard	70.0	40 lb

*Standard sizing can range from 215-240 SGN depending on raw material supply and sizing.
**Release rates assume 70˚F

Diversification, Growth, And Beyond

Publicly traded since 1996 (NASDAQ: ANDE), The Andersons is a diversified company conducting business across North America in the grain, ethanol, plant nutrient and logistics sectors.

The Andersons is taking the same dedication and deep market knowledge that filled our elevators with grain almost 70 years ago to create fresh ways to serve our customers. We're building a cutting edge network of transportation and logistics facilities that maximize our reach. We're expanding into new markets using patented technology to take our businesses further, faster. We're developing a line of products that make the grass greener and the yield bigger. We're repurposing today's resources into useful solutions for tomorrow and joining the quest for a world run on renewable energy. We're finding a way to compete on a global level and still feel like a small business, and never losing sight of our simple goal of serving God by serving others.

We'll be fair and honest, tried and true, because those are the things that got us here. The Andersons story has as much to do with ingenuity as it does with legacy. A story about enduring relationships. A story about a team that is going beyond the ordinary; beyond the status quo; and beyond expectations.

Our Mission:

We firmly believe that our Company is a powerful vehicle through which we channel our time, talent, and energy in pursuit of the fundamental goal of serving God by serving others. Through our collective action, we greatly magnify the impact of our individual efforts to:

- Provide extraordinary service to our customers
- Help each other improve
- Support our communities
- Increase the value of our Company

The Andersons PLANT NUTRIENT

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