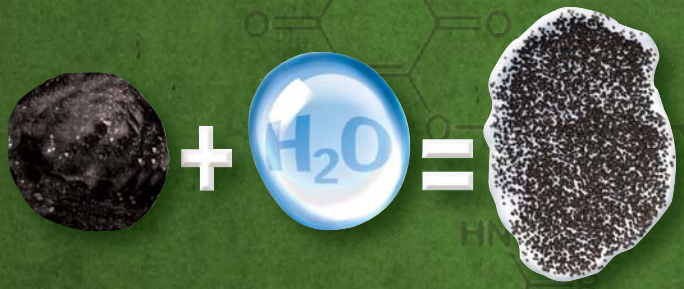
The Andersons®

Humic 12 DG™

Introducing...

THE NEXT GENERATION OF HUMIC ACID

BIOLOGICAL | DISPERSIBLE | SPREADABLE | BLENDABLE



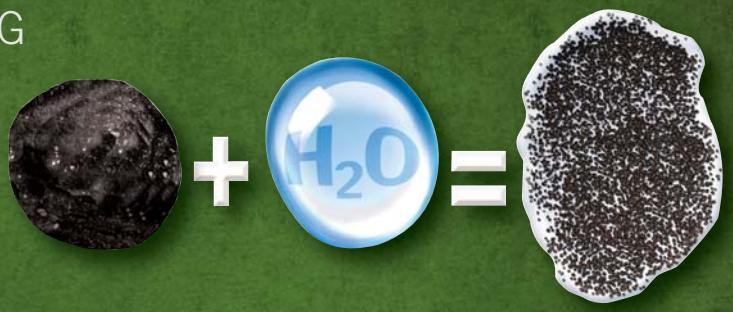
The Andersons®

AndersonsTurf.com

THE ANDERSONS DISPERSING GRANULE TECHNOLOGY

ENHANCED HUMATE DISTRIBUTION

Upon contact with water, each Humic DG granule disperses into thousands of micro particles that move directly into the root zone.



Humic DG's uniform spherical granules are easy to handle and spread evenly. They are ultra dry and ideal for blending with all types of fertilizers!

BIOLOGICAL >	Contains four biologically active components; HAP, fulvic acid, humic acid and humin
DISPERSIBLE >	Dispersing Granule Techology facilitates granule breakdown and soil incorporation
SPREADABLE >	Uniform, spherical granules allow for ease of handling and even application
BLENDABLE >	Ultra dry granules are engineered to be compatible with all fertilizers including urea

WHAT IS HUMIC ACID?

Humic acid is a natural soil conditioner that acts as an organic chelator and microbial stimulator. It has a unique carbon matrix which includes a high concentration of trace minerals and organic acids. Humic acid enhances the plants ability to take in essential nutrients and improves soil structure.

Researchers at The Andersons have combined pure, dry humate with Andersons patented DG (dispersing granule) process to create a spherical granule that contains thousands of micro sized humate particles. Humic DG dissolves into the soil within a few minutes after application and watering. The micro particles released from Humic DG granules immediately go to work to improve nutrient efficiency and soil conditions.

All materials used in Humic DG™ are listed by the Organic Materials Review Institute (OMRI) for use in production of organic food and fiber.

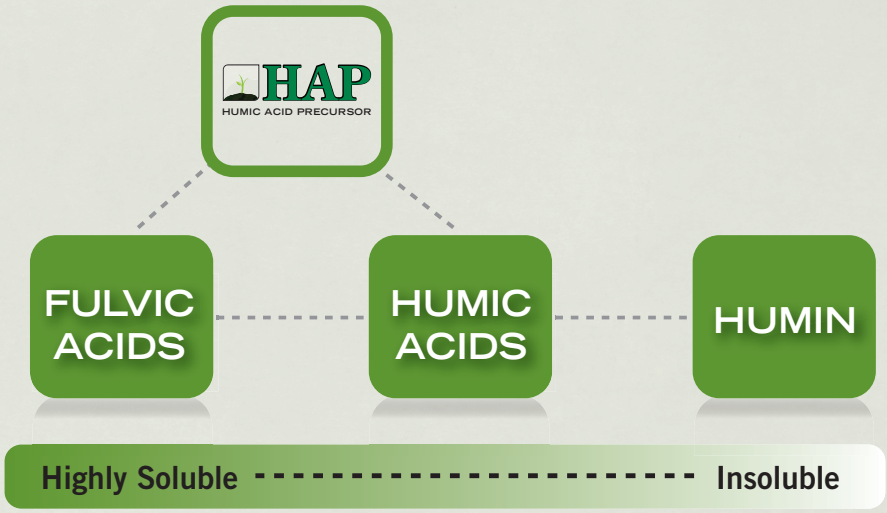
PROVEN HUMIC ACID BENEFITS

- Increases soil carbon
- Improves plant health
- Improves germination and viability of seeds
- Chelates macro and micro nutrients to increase availability to the plant for a longer period of time
- Increases cation exchange capacity (CEC)
- Improves soil structure for better aeration and water movement
- Stimulates beneficial microorganisms, which can improve long-term soil pH.
- Especially effective on sandy soils

"BIOLOGICALLY ACTIVE" COMPONENTS OF Humic DG

Humic DG is comprised of four biological components that range from very soluble to completely insoluble in soil media. These four components work together to provide the soil with a broad range of biological benefits, from plant available fulvic acids to the insoluble, high nutrient holding capacity of Humin.

- **FULVIC ACIDS** can be absorbed by root tissue and provide hormone–like stimulation to the plant. It also aids in the efficiency of other plant metabolic reactions.
- **HUMIC ACIDS** can be insoluble or soluble. It has a high cation exchange capacity (C.E.C.) and helps chelate nutrients and stimulate soil microbes.
- **HUMIN** are large, high carbon, insoluble molecules that last the longest in the soil and have great nutrient holding power.
- **HAP** (Humic Acid Precursor) is a soluble portion of Humic DG that quickly dissipates into the soil. Beneficial soil microbes feed on HAP, transforming it into soluble Fulvic and Humic acids.



HAP THE HAP STORY

HUMIC ACID PRECURSOR

HAP contains a soluble form of organic carbon which releases into the soil as Humic DG granules disperse. Research has shown that organic carbon holds nitrogen in the soil and binds readily with carbon based acids. This increases the amount of dissolved organic carbon in the soil water.

Through biochemical reactions, HAP is transformed into humic and fulvic acids which help chelate nutrients in the soil. This enhances nutrient uptake by the plant of applied fertilizers and soil nutrients.

BENEFITS OF HAP

- Increases soluble carbon in the soil.
- Prevents nutrient loss by helping balance the carbon to nitrogen ratio.
- Highly effective in carbon depleted soils and other sand based growing systems.

APPLICATION RATES* OF HUMIC DG

- **CROPS (BROADCAST):** 40 lbs/acre (45 kg/ha)
- **CROPS (IN-FURROW/BANDED):** 4-10 lbs/acre (4.5 -11.2 kg/ha)
- **TURF:** 40 – 200 lbs/acre (45 -224 kg/ha)
- **TREES, SHRUBS:** 2-8 oz (57-227 g) per tree or shrub
- **ORNAMENTALS & BEDDING PLANTS:** 1-2 lbs/1000 ft^2 (5-10 g/m^2)
- **POTTING SOILS:** Mix 2-10 lbs/yd^3 (1.2-5.9 kg/m^3) of potting mix

*Refer to label for complete use instructions

The Andersons

Humic DG™

Humic DG™ is clean and easy to handle.

EXPERIENCE THE QUALITY DIFFERENCE FOR YOURSELF!

Humic DG utilizes patent pending technology to create uniform, spherical dispersing granules. Highly engineered DG granules have a low moisture content and are resistant to breakage during handling.

Competitor's dry humic acid product is dusty, non-uniform containing up to 20% moisture

TYPICAL PHYSICAL PROPERTIES - SGN 210 and SGN 100

Product	Packaging	Bulk Density lb/cubic ft	UI	Moisture		Resistance to Attrition	Humic Acid Content (A&L Method**)	Appearance
				Target	Maximum			
Humic DG	40 lb bag 2000 lb bulk bag*	40	40+	7%	9%	90%	62%	Black Granule

* SGN 210 only

**For states that utilize the California testing method, refer to andersonsturf.com for label information

The Andersons

The Andersons, Inc. is a diversified corporation located in Maumee, Ohio USA with interests in the grain, ethanol and plant nutrient sectors of U.S.A. agriculture as well as railcar leasing and repair, turf products production, and general merchandise retailing. For more information visit our website www.andersonsinc.com

TURF AND SPECIALTY GROUP

GRAIN GROUP

ETHANOL GROUP

RAIL GROUP

PLANT NUTRIENT GROUP

RETAIL GROUP