

# Your Granular Source of Humic Acid

## WHY USE ACTIV80 AG?

#### Economical.

Most cost-effective way to apply a high volume of humic acids to your soil.

#### Canadian Source.

From the highest quality, most consistent source of humic, **ACTIV80 AG** is high in humic acid but low in ash and heavy metals.

# **Application Options.**

May be applied in-furrow, broadcast or as part of potting mix.



Approved by the CFIA

# **BENEFITS OF HUMIC ACID / FULVIC ACID**



#### **BIOLOGY**

Provides a food source for soil microbes, increasing their activity in mineralization and crop residue breakdown processes.



#### **STRUCTURE**

Improves soil tilth and aggregation through improving aeration and water movement in the soil.



#### **CHEMISTRY**

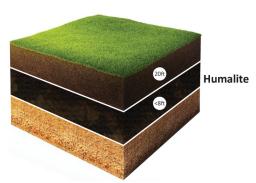
Increases the soil's Cation Exchange Capacity thus improving nutrient availability. Because it is amphoteric (neutralizes), it also impacts pH challenged acidic or alkaline soils, creating a more seed friendly environment, thus improving seed germination and viability.



#### **NUTRITION**

Creates nutrient bridges and displaces nutrients off of clay through electrostatic charges, making nutrients more plant available.

# WHAT DIFFERENTIATES BLACK EARTH'S HUMICS FROM OTHER HUMIC PRODUCTS?

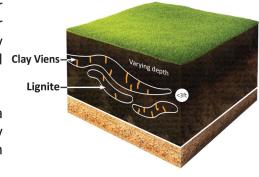


Black Earth Humic is unique because of its source. Mined in Alberta, Canada, our source was developed from flora with a very high nutritional value with freshwater in pre-glacial times. When the glaciers re-ceded, this layer was also exposed to oxygen, transforming it from sub-bituminous coal to weathered sub-bituminous coal, which when now used makes the humic substances much more available.

This layer is also a consistent layer, making it easy to mine and of consistent quality. Because it originated predominantly of plants, it also has low ash and heavy metal content. Because of these unique features, this area's source is technically called, "humalite".

Conversely, most other sources of humic acids come from "leonardite" or "lignite" sources. Because they were developed through salt water deposits and often a mix of flora and fauna sources, they usually naturally have higher ash and heavy metal content than humalite. Their humic and Clay Viensfulvic acid contents are also generally not as high nor as consistent.

Because of how the deposits were formed, they are not in an even strata and can wave into multiple layers, making mining more difficult. Quality and consistency of mined product can therefore vary greatly from geographical location and depth within a mine.



#### **CROPS & APPLICATION RATES**

May be utilized with any crop.

#### **Broadcast:**

115-285 kg/ha (100-250 lbs/ac)

#### In-furrow or side dress:

45 kg/ha (40 lbs/ac)

### Substrate or potting mix:

1%-5% of total soil or substrate

## PRODUCT INFORMATION

## **PACKAGING:**

25 kg (55 lb) bags; 909 kg (2000 lbs) mini-bulk bags

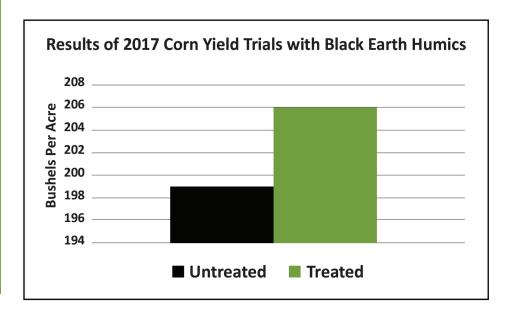
## **STORAGE:**

**Small bags** – store indoors. Avoid water and high humidity.

Mini-bulk bags – may be stored outdoors up to 1 year, preferably covered. Do not place directly on ground.

#### MIXING & BEST PRACTICES INSTRUCTIONS

- Soil apply only.
- When possible, utilize separate tank on seeding equipment for ACTIV80 AG for in-furrow application
- For broadcast application, best results are during calmer days to prevent dusting.
- ACTIV80 AG product integrity can degrade with excessive handling.
   For optimal results, minimize auguring to avoid particle size degradation.
- May be blended with MAP 11-52, or Potash 0-0-60. Best practice is to blend just prior to application.
- Do not mix with urea.
- Product can be impacted by moisture and humidity. Do not let product sit within equipment for an extended period.
- Since product is somewhat dusty, it is advised to wear a dust mask when using.



## **TECHNICAL DETAILS**

# Humic Acid 80%, (Colormetric method) pH 3.5 - 4 Moisture 28% Colour Black Type Granule Bulk Density 740 kg/m³or 49 lbs/ft³

Particle Size		
Typical	Mesh Size	Millimeters
35%	6 to 10	3.35 to 1.99
55%	10 to 40	1.99 to 0.42
10%	<40	<0.42



