

## Dry Soluble 80 Organic (Soluble Powder)

### Certifications

Black Earth Dry Soluble 80 is registered with OMRI



### Benefits

- Completely Water Soluble
- Minimum 93% Humic and Fulvic Acids Content
- 1 - 0 - 19 Nutrient Content
- Use as Dry or Liquid
- Great for Fertigation or Seed Treatment
- More Economical than Shipping Liquid

### Description

Our Black Earth Dry soluble 80 Organic is an entirely soluble product that dissolves readily in water to create liquid humic solutions. It contains both humic and fulvic acids, as well as added nutrients N and K. Unlike fertilizers, it works to not only benefit the plant now, but also improve solid conditions for the future. It is made from a naturally occurring type of oxidized coal that is very rich in humified organic matter - humic and fulvic acids - with minimal impurities.

All of our products are backed by solid scientific research proving their effectiveness. We perform frequent quality control testing to ensure the quality and consistency of our products. Dry Soluble 80 Organic is classed as a non-hazardous material that has extremely low toxicity values. It may be used in dry or liquid form as a soil amendment, foliar spray, or fertilizer enhancer.

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Discover the benefits of Dry Soluble 80 Organic ►

## Available Packaging

- 55 lb ( 25kg) Box
- 2000 lb Tote bags

## Other Applications

- Hydro Seeding
- Turf
- Horticulture
- Green houses
- Hydroponics
- Nursery
- Ornamental
- Orchards
- Vineyards
- Deep root treatment
- Soil remediation
- Hydrocarbon flushing

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## Additional Information



Our Dry Soluble 80 Organic is ideal for use on all soils and plants under all conditions. Humic and fulvic acids in our DS 80 Organic act as natural chelating agents, binding to nutrients in the soil. The plants roots absorb these humic acid nutrient compounds effectively increasing

the efficiency of the plants uptake of nutrients and decreasing nutrient losses caused by leaching. Being a concentrated and soluble powder, it is fast acting, and in liquid form, highly effective at delivering humic acids deep into the soil and/or to the plant. In combination with fertilization, it allows you to get the most out of your fertilization program and may even reduce the amount of nutrients applied. It will contribute to improving soil quality, texture, water holding capacity and sustainability, all while breaking down clay lattices and reducing sodium build up in soils.

By using a DS 80 Organic product, you can make small batches when are where it is needed. There is no need to over-winter excess liquid, so storage and handling is much easier.

## Technical Data

### Physical Analysis

### Typical

<b>Humified Organic Matter</b>	93%	
<b>Moisture</b>	5-10%	
<b>pH</b>	7.0 - 7.5	
<b>Color</b>	Brownish - Black	
<b>Bulk Density</b>	Loose -	54.0 lbs/ft.3 866 kg/m3
	Tapped	60.0 lbs/ft.3 965 kg/m3

### Screen Analysis (% by weight)

Tyler	Screen Size	Typical %	Size mm
-100	200	25%	-0.1499 to 0.0737
-200		75%	-0.07366



Black Earth Humic Production Facility in Ryley Alberta, Canada

## Guaranteed Analysis

Contains:

**NONPLANT FOOD INGREDIENTS**

Humic Acids....93%

(A&L Analytical Method)

Total of Other Ingredients ....7%

(Inert Material)

Derived from Leonardite

## Application Rates

### Directions for Use

Proper timing, rate, and placement of Black Earth Dry Soluble 80 Organic is important for desired results and dependent on soil fertility levels, and environmental conditions.

### Mixing Directions

Black Earth Dry Soluble 80 Organic should be thoroughly mixed with water to produce liquid humic products. The following amount of Dry Soluble 80 Organic is required to make a liquid humic material.

Desired Humic Substance Concentration	Amount of Black Earth Dry Soluble 80 Organic Required
6%	77g/liter of water or 0.64lbs/gallon of water
12%	154g/liter of water or 1.28 lbs/gallon of water

The resulting Dry Soluble 80 Organic solution is compatible with many liquid fertilizers and micro nutrients. Addition of the solution made from Dry soluble 80 Organic to these products should not be done without first testing compatibility on a small scale. When mixing with water, fill container three quarters full, add the Dry Soluble 80 Organic slowly with good agitation or circulation of water, then add remaining water. Ensure adequate agitation in all situations. A de-foaming agent may be required.

**DO NOT** Mix Black Earth Dry Soluble 80 Organic with Calcium Nitrate, phosphoric acid, zinc sulfate, or other solutions with a pH of less than 6.0 or solution may start to precipitate out.

**CAUTION:** When combined with aqua ammonia, vapor releases may result in pressure build-ups. For such mixtures, only use mixing and application equipment that is vented and/or have pressure relief vales.

### Special Note

The following application rates are based on the production of a 6% liquid humic material. The rates for a 12% liquid humic material are half that of the listed rates.

### Agriculture

**Seed and Potato Seedpiece :** Apply 4-8 liters of a 6% liquid humic material in 100 liters of water as a seed treatment spray or dip.

**Transplant Water:** Apply 2 liters of 6% liquid humic material in 100 Liters of water.

**Preplant in-Furrow, Sidedress, and Foliar Applications:** Apply 10-25 liters of 6% liquid humic material per ha (or 1.1 - 2.6 gallons/acre). Band or broadcast a 6% liquid humic material in tank mixture with or sequentially to fertilizer applications.

### Horticulture

**Transplant and Cuttings:** Apply 2 liters of a 6% liquid humic material per 100 liters of transplant solution.

**Trees, Shrubs, and Bedding Plants:** Mix 0.7 mls of Dry Soluble 80 Organic with 1 liter of water (or 0.5 teaspoons per gallon of water). Apply resulting solution to plant material.

**Established Ornamentals:** Use 2liters of a 6% liquid humic material per 100 liters of water every 45-60 days during the growing season. Apply as normal irrigation. As part of a fertilization program, apply 18 liters of a 6% solution per 100kgs ( or 2.2gallons/100lbs) of actual plant nutrients. Water in thoroughly.

### Landscape and Turf

Broadcast 45-90 ml of a 6% liquid humic material per 100m2 (or 3-6 tablespoons/1000ft2) in 4-6 equal applications throughout the growing season. Irrigate into the soil.

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## Certificate of Analysis - Dry Soluble 80 Organic

### Sample - Dry Soluble 80 (Organic)

FERTILIZER AND LIME ANALYSIS REPORT	
Nitrogen %N	1.28
Total Phosphate % P <sub>2</sub> O <sub>5</sub>	<0.01
Potash % K <sub>2</sub> O	18.96
Sulfur % S	
Zinc % Zn	<.001
Available Phosphate % P <sub>2</sub> O <sub>5</sub>	<.001
Non-Ortho Phosphate % of Total P <sub>2</sub> O <sub>5</sub>	
Sulfate Sulfur %	
Calcium % Ca	0.31
Magnesium % Mg	0.03
Calcium Carbonate Equiv. % CaCO <sub>3</sub>	
FE %	0.37
MN %	0.004
CU %	0.005
B %	0.003

### Sample - Dry Soluble 80 (Organic)

NON-NUTRITIVE METALS			
Detection Limit	Analyte	Level Found mg/kg	Method Reference
0.5	Arsenic	BDL	EPA SW846-6010
0.1	Cadmium	0.1	EPA SW846-6010
0.1	Cobalt	0.2	EPA SW846-6010
1.2	Lead	BDL	EPA SW846-6010
1	Molybdenum	BDL	EPA SW846-6010
0.1	Nickel	0.7	EPA SW846-6010
5.5	Selenium	BDL	EPA SW846-6010
0.1	Zinc	3.3	EPA SW846-6010
0.05	Mercury	BDL	EPA SW846-7471A
0.1	Copper	1.3	EPA SW846-6010

Sample Preparation Method: EPA SW846-3050B

BDL - Indicates the level found is below the established detection limit for that analyte on an 'as received' basis

Sources: A & L Western Agricultural Laboratories Inc., 2011

Disclaimer: This product may not be available for purchase or authorized for use in every state. In addition, some states, countries and cities may require special licensing and training to sell, purchase or apply the product presented in this brochure. It is the responsibility of the distributor, retailer or professional applicator to verify, before product sale/purchase, that the product is approved for the use intended in their state, country and city.

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