

# BioSphere AgriTech-D ABW

## *Technical Specifications and Application Instructions*

### **Product Description:**

BioSphere AgriTech-D ABW is an organic complex of biostimulants, and natural microbiological activity blended in harmony with a natural insect control agent. When used according to directions BioSphere AgriTech-D ABW will control insect populations while increasing organic matter in soils, improving seed germination rates, building greater root mass and heartier stalks, and increasing brix levels. The increase in brix levels grows tastier and more nutrient rich fruit and creates a second level of insect protection as insects naturally attack weaker fruit.

### **Product Specifications:**

Food Grade Diatomaceous Earth	20.4%
Bacillus Subtilis	$4.1 \times 10^7$ cfu/g
Pseudomonas Fluorescens	$3.0 \times 10^9$ cfu/g
Paenibacillus Polymyxa	$2.5 \times 10^7$ cfu/g
Azobacter Chroococcum	$6.0 \times 10^7$ cfu/g
Appearance:	Light gray powder
Solubility:	100% in water (some powder may remain in Suspension)
Bulk Density:	1.7 mL / gram or 26.08 fluid oz / Lb

### **Benefits:**

1. Diatomaceous earth scores the exoskeletons of most invasive insects, including the American Bluegrass Weevil, allowing microbes to naturally enter their bodies, causing desiccation.
2. Diverse populations of microbes that are naturally present in soils are part of BioSphere AgriTech-D ABW will create problems for insects at all stages of the invasive insects' life cycles.
3. Aids in nutrient uptake, which invigorates plants' natural defense systems.
4. Builds higher protein and sugar levels in plants, which will build stronger fibers that are difficult for insects to digest.



## Directions for Use:

For best results liquid application is recommended for BioSphere AgriTech-D ABW. Please refer to the application rates below when measuring out the quantity to add to the tank or sprayer.

### Liquid Application:

1. Add 120 to 240 Millilitres of water to each 1 weight measured ounce of BIOSPHERE AgriTech-D ABW in a pail and agitate until powder goes into full suspension.
2. Add water and other liquid fertilizers to tank or hand sprayer as directed.  
Add pre-mixed BIOSPHERE AgriTech-D ABW solution to the tank.
3. Top tank with water to disperse BioSphere AgriTech-D ABW throughout tank. The end result should be a minimum of 16 oz of water to every 1 oz dry weight measure of BioSphere AgriTech-D ABW.
4. Spray generously around and on plants or grasses of concern. Make sure that leaf surfaces are adequately covered.

### \*\*\*\*\*Note\*\*\*\*\*

If a light-coloured residue is left on the leaves after the water evaporates off there is no reason for concern. That is the diatomaceous earth that is there to etch the bodies of insects. It is not dangerous to the plant.

## Recommended Application Rates:

### Row Crops:

1<sup>st</sup> Application: 616 g per hectare dry weight measure of BioSphere AgriTech-D ABW per acre (0.0616 g per m<sup>2</sup>) 2<sup>nd</sup> Application: 309 grams per hectare (g/ha) dry weight measure of BioSphere AgriTech-D ABW per acre (0.0309 g per m<sup>2</sup>).  
Apply every 4 to 6 weeks as a general rule, but more often if insect populations are a problem.

### Trees, Shrubs, and Leafy Plants (including fruit and vegetable plants):

1<sup>st</sup> Application: A minimum of 616 g per hectare dry weight measure of BioSphere AgriTech-D ABW per hectare (6.1 g per 100m<sup>2</sup>).  
2<sup>nd</sup> Application: A minimum of 308g dry weight measure of BioSphere AgriTech-D ABW per hectare (3.05g per 100m<sup>2</sup>)  
1) Apply every 4 to 6 weeks as a general rule, but more often if insect populations are a problem.  
2) Fruit bearing plants will likely need applications every week during peak insect seasons.  
3) Tree applications include spraying around entire root area beneath the trees, trunks up to 6 to 8 feet above the ground, and boom spray to cover all leaves. This may require more than the recommended application quantity shown above.  
4) Leafy plant and shrub applications include spraying around and all over the plant surfaces. This may require more than the recommended application quantity shown above.

\*\*\*\*\*Note: No damage will occur to plants if amounts above the recommended application rates are applied.

# BioSphere AgriTech-D ABW

## *Backpack Sprayer Application Instructions*

### Assumptions Used

- Spray volume: 200 L per hectare (typical field application rate)
- Knapsack sizes: 15 L and 20 L
- Product form: Dry weight (wetttable powder)

If your carrier volume differs (e.g., 150 L/ha or 300 L/ha), these figures can be recalculated precisely.

### 1st Application

Target rate: 616 g per hectare

#### Knapsack equivalents

- Per litre: 3.08 g/L
- 15 L knapsack:  $\approx 46$  g per tank
- 20 L knapsack:  $\approx 62$  g per tank

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### 2nd Application

Target rate: 308 g per hectare

#### Knapsack equivalents

- Per litre: 1.54 g/L
- 15 L knapsack:  $\approx 23$  g per tank
- 20 L knapsack:  $\approx 31$  g per tank