

# Planters

## Product Usage Guide



## At AEA, we think differently about agriculture.

1. **We believe in empowering life instead of suppressing it.**
2. **We believe a healthy plant will be more resistant to insects and disease. To start thinking about agriculture differently, we need to use our equipment differently as well.**

**AEA's regenerative products are unique formulations of naturally-derived minerals.**

If not properly handled, these natural products may:

- ⊗ **Damage pumps and equipment**
- ⊗ **Clog sprayer nozzles**
- ⊗ **Be hard to clean**

## Mixing Instructions

Read these instructions to avoid any problems when handling our products!

**Make sure you agitate, filter, and clean.**

1. **Store between 40-80°F and out of direct sunlight.**
2. **Venting**
  - a. Containers may expand during shipping.
  - b. Upon receipt, slowly unscrew lids to release pressure.
  - c. Rinse the caps so they can self-vent.

**NOTE:** A biofilm often forms on the product's surface. This is normal. Skim it off before agitating. Skimming isn't practical on totes. To remove biofilm, filter with 1/8" mesh after agitating.

3. **IMPORTANT: Agitate** thoroughly before each use to mix material from the bottom
  - a. **There are many ways** to agitate totes and barrels: Tote mixer, air wand (pneumatic mixer) (under 40 psi), paint-mixer electric drill attachment, transfer pump recirculation, or trolling motor.

**b. We recommend** to use an air wand in the corners, then a tote/drill mixer.

**c. Use caution** when agitating certain products:

- i. **Do not** use an air wand with Accelerate™, SeaShield™, or MacroPak™. If using a mechanical mixer, do so with caution. These products can sometimes foam and expand
- ii. Rebound Manganese™, HoloCal™ and HoloPhos™ may expand while mixing with air wand or drill mixer. Keep an eye on them.
- iii. Rejuvenate™ swells rapidly by ~25% when agitated. Remove 25% from its container to create room for expansion. Use equal parts from original and new container. Recombine for storage.

**d. Avoid pumping undiluted products.** They're abrasive and may damage pumps.

- i. Get products out of totes by raising tote and using gravity.

**4. IMPORTANT: Mix and Filter** *before* products go into the application tank.

- a. Use a mix/nurse tank equipped with recirculation (if necessary, mix in your spray tank).
- b. Fill nurse tank with water before adding in products.
- c. Dilute with water to achieve a desired consistency.**
  - i. Use a minimum of 8:1 ratio, water to product
- b. Shake/agitate/mix products prior to pouring.
- c. Pour products into nurse tank through a 15 mesh screen. Make sure the tank is recirculating.
- d. If using multiple products, add them one at a time while recirculating.
- e. Run nurse tank for 10 to 15 minutes until product is suspended.
- f. Once mixed well, clean out filter. Then pump into planter through a 30 mesh filter. AEA products should never be put through a screen finer than 40 mesh.

**5. If pesticides must be in your tank mix:**

- a. Herbicides may denature our products when mixed together.
- b. Always do a jar and spray test** before using non-AEA materials in an application.

**6. Drain and clean agitation** equipment after each use and before it goes into other containers. This will prevent cross-contamination and clogs in your spray system.

## Applying Instructions

**Ensure the product is agitated, filtered, and suspended in mixture before using.**

1. Run your recirculation route with as much volume as possible.
  - a. Some growers create a custom build-out to continually agitate throughout use.
  - b. Several growers have had success without agitation.
2. Filters
  - a. Always keep one main large filter of mesh size 30-40.
  - b. The best option is metering microtubes. Metering tubes create a more laminar flow.
  - c. If you are going to use an orifice, please don't use any smaller than #59 (.059"), but you may need to remove orifice screens.
    - i. Orifice sizing:
      - 30 mesh: .023" or 600 micron
      - 35 mesh: .0197" or 500 micron
      - 40 mesh: .0157 or 400 micron
  - d. AVOID pulsating magnetic flow control.
4. Thoroughly **rinse and flush** equipment after application.

## Product Combination Instructions

### Mineral Nutrients

1. Fill the tank halfway with water and start agitation.
2. Add SeaShield™ first, if part of the application.
3. Continue agitating while adding the remaining liquid AEA products, then the rest of the water.
4. Save HoloCal™, Holo-K™, and HoloPhos™ as the last liquid ingredients.
  - a. Do not combine other calcium and phosphorus products in an AEA tank mix without prior jar testing

### Inoculants

1. Add inoculants after all nutritional materials.
2. Make a slurry with Spectrum™ or other Tainio™ powders by mixing with water in a separate small container.
3. Agitate, allow to hydrate for a minimum of 15 minutes, then add to the tank through a filter.
4. BioCoat Gold™ should NEVER be added to a liquid solution.



Advancing Eco Agriculture

### Questions?

Contact your account manager, agronomist, or our Customer Care Team:

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