



# Sprayers

## 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 can form 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. **For totes**, it's best to use an airwand in the corners, then a tote mixer.
  - i. HoloCal™ and HoloPhos™ may fizz with an air wand. Keep an eye on them.

- b. **There are many other ways** to agitate totes and barrels: clean pneumatic mixer (under 40 psi), paint-mixer electric drill attachment, transfer pump recirculation, trolling motor, even a canoe paddle.

- c. **Avoid pumping undiluted products:** they're abrasive and may damage pumps.

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

- d. **Rejuvenate™ swells rapidly** by ~25% when agitated.

- i. Remove 25% from its container to create room for expansion.
- ii. Use equal parts from original and new container. Recombine for storage.
- iii. **Do not use a pneumatic mixer with Rejuvenate.**

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

- a. Use a mix tank equipped with recirculation (if necessary, mix in your spray tank).
- b. Add at least half the water to the tank and start recirculation with a coarse in-line filter (15 mesh).
- c. If using multiple products, add them one at a time while recirculating.
- d. Once mixed well, add to the sprayer through a finer filter (30-50 mesh).
- e. AEA products should never be put through a screen finer than 50 mesh.

**5. Dilute** with a minimum 10 parts water.

- a. Dilute more as needed for proper coverage according to the recommended rate.
- b. For foliar applications, dilute with 20 or more parts water.
- c. Use 20 gallons per acre on a ground rig.
- d. Use a higher dilution rate on fruiting crops.
- e. Fruit growers: be aware that dark products like Rejuvenate can stain fruit.

**6. If pesticides** are in your tank mix:

- a. Pesticides may burn leaves or cause problems when mixed with our products.
- b. Ensure the pH and EC lie within the range given on the pesticide label.
- c. **Always do a jar test** before spraying when using non-AEA materials.

**7. 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.

## Spraying Instructions

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

**1. Remove tip filters.**

- a. Clogs in multiple spots are a risk if the spray rig has more than one filter.
- b. Larger droplet size is preferred. Use a #4 or #5 tip.
- c. We recommend high-volume, low-pressure nozzles like Floodjet™ with screens removed; or non-air inducted, even flat spray tips like TeeJet®.

**2. Start with a 50 mesh filter.**

- a. If the screen clogs and disrupts product flow, go down to 35 or 30 mesh.
- b. Do not use a filter finer than 50 mesh.

**3. When using inoculants,** keep pressure under 40 psi to avoid damaging the microbes.

**4. Keep the tank agitated** to maintain suspension during application.

- a. When a spray mix is not agitated, the product may settle and clog equipment.

b. For **nurse tanks**:

- i. Transfer pumps should have the filter on the outlet side of the pump.
- ii. The pumps can be used to recirculate mix, then transfer it into sprayer.

c. For **airblast sprayers**, use larger mesh sizes to avoid clogging.

- i. Main Filter (before pump): 25-30 mesh protects pump from large particles.
- ii. Suction Filter: 30-50 mesh allows thick materials to flow without clogs.
- iii. Nozzle Filters: 50-80 mesh prevents nozzle blocks; ensures even spray.
- iv. For very thick materials, try larger mesh sizes and stir tank contents to avoid settling and clogging.
- v. We see fewer clogs when using higher dilution rates.

d. Most **saddle tanks** don't have a way to agitate while spraying.

- i. You either need to spray promptly or build a custom agitator on your tank.

**5. Thoroughly rinse and flush** equipment after application.

- b. Don't leave the mix in a tank overnight: it will settle and cause problems.



Advancing Eco Agriculture

### Questions?

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

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