

Pesticide Tank Cleaning Notes and Procedures

Cleaning a sprayer in between uses is very important when farming vegetable crops. Pesticides include insecticides, fungicides, bactericides and herbicides. In many cases, producers may combine several pesticides in a tank and spray at one time. But this is often not the case with herbicides. Optimally, growers will use separate tanks: one for fungicides, bactericides and insecticides and another for herbicides. Even with separate tanks, cleaning between uses is imperative. There are four major categories of herbicides: preemergent (used before weeds emerge), postemergent (used after weeds have sprouted in the field), selective (kills only particular crops), and nonselective (kills all crops). A grower increases their odds of devastation especially when spraying a nonselective herbicide followed by a selective herbicide if proper cleaning between uses does not occur. Louisiana specialty crop producers often grow more than one type of crop on their farm. Pesticide labels provide specific regulations on rate, timing of spray, and crops that can be sprayed with individual pesticides. Cleaning pesticide tanks between applications, prevents self-caused damage to crops.

When cleaning a pesticide spray tank there are three primary objectives:



Reducing the active ingredient to a level that will not damage crops



Deactivating the herbicide



Removing the pesticide from the sprayer

Damage from an unclean tank can reduce crop yield even if you do not see major symptoms!

THE FOLLOWING ARE SPRAY TANK CLEANING POINTS OF INTEREST:

- **Use personal protective equipment (PPE).** Before attempting any tank cleaning procedure, make sure that you have the proper PPE as listed on the label of the pesticide in which you are cleaning. Examples of PPE can include but are not limited to latex gloves, N95 mask, etc.
- Why is it important to clean your sprayer? The next field that gets sprayed can be contaminated if not properly cleaned.
- **Household ammonia** and **bleach** are approved tank cleaning solutions. **A 1%-2% solution is the standard recommendation.** (Note: Ammonia does a great job of pulling deposits off the walls of the sprayer but can form sludge in the bottom of the tank if not removed in a timely manner. **Never mix bleach with ammonia or use bleach in a tank that contains fertilizer as the reaction can cause a dangerous chlorine gas.** The gas can irritate the eyes, throat and lungs.
- Commercial tank cleaners are available if needed.
- The pesticide label often contains information regarding the type of tank cleaner required for proper cleaning of chemical residue from spray equipment.
- **Wash all parts of the sprayer that can come into contact with crops** to prevent further injury or damage.



NOTE: Clean any portion of the sprayer that may contact the next crop. Think about the boom, nozzles, shields and even tires if you go over a portion of the field twice.

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SIX STEPS TO PROPERLY CLEAN A PESTICIDE SPRAYER

1

Completely rinse chemical from the tank. Do not allow the mixture to sit in sprayer or lines overnight. The remaining chemical should be discharged in a field or area compatible with the chemical being rinsed. Drain the tank completely.

2

Rinse the inside of the tank with clean water. If necessary, use a hose with a flexible nozzle to aid in the rinsing of the tank and lid.

3

Fill the tank halfway with water. Add 1%-2% rate of ammonia or bleach or an approved label rate of a commercial tank cleaner. Agitate liquid (i.e., driving, installed agitator or shaking handheld or backpack tanks).

4

Spray out and/or drain solution in a safe area. Rinse and reinstall tips, screens and filter screens.

5

Add clean water to the tank and perform the final rinse.

6

Rinse all areas of the sprayer that may encounter the next crop. Boom, tires, tire shields, etc.

SPRAY TANK CLEANING POCKET CARD

- Spray all chemical from tank. Spray the remaining chemical in a field that is compatible with the chemical being used.
- Rinse the inside of the tank.
- Fill tank halfway with water
- Add the tank cleaner in a 1-2% solution or at the labeled rate.
- Spray out solution. Rinse boom components.
- Add clean water. Perform final rinse.
- Rinse boom and sprayer.

REMEMBER THOROUGH CLEANING IS KEY TO PREVENTING CROP INJURY.

Always remember that thorough cleaning of your spray equipment can prevent future crop damage and yield loss.

The above is a general set of guidelines for properly cleaning spray tanks. Refer to the product label for specific cleaning instructions.

Additionally, proper calibration of equipment can prevent having too much mixed chemical left over after spraying a field. If you need help calibrating your sprayer, consult pages 120-126 of the 2023 Southeastern U.S. Vegetable Crop Handbook.

<https://vegetablegrowersnews.com/2023-southeast-vegetable-crop-handbook/>

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