

# Engenia®

Herbicide

## Spray System Hygiene

**Comprehensive cleaning of sprayers and filling systems is a crucial element to successful use of Engenia® herbicide.**



Non-dicamba-tolerant soybeans are extremely sensitive to dicamba even at low doses.

Symptomology can occur to sensitive soybeans with as **little as 3 mL of formulated product OR 12 fl oz of leftover spray solution** in a 1000 gallon spray tank sprayed at 10 gallons per acre.

**BEFORE** and **AFTER** using Engenia herbicide, thoroughly clean the sprayer and spray system (including fill lines, nurse trucks, pumps, etc.) by performing a triple rinse procedure using a *detergent based commercial tank cleaner*.

### Mixing and Loading Herbicides

Mixing and loading herbicides is not always a simple process of pouring a herbicide directly into a sprayer. With advances in technology and product handling systems, herbicides often take a much more elaborate route to the spray nozzle.

Dicamba is transferred from a bulk tank to a mini-bulk tank.



The herbicide is then pumped into a into a mixing vat, through a manifold and 100 feet of pipe.



Then it is pumped through a 50 foot hose into a nurse truck and finally to the sprayer.



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**Technical Information Bulletin**

## Common Contamination Points

Pesticide residue left in or on any container or equipment used to store, transfer, or apply products can be a source of contamination. *Everything* that dicamba has touched during the process of handling and mixing must be cleaned.

While every spray mixing and loading setup is different, here are common contamination points that need to be cleaned with a triple rinse prior to and after using Engenia® herbicide:

Prior to the sprayer*	On the sprayer**
Mini bulk lines	Tank
Transfer pumps	Hoses/Fill Line
Mixing vats	Inductor
Transfer hoses	Screens
Manifolds	Line filters
Overhead fill lines	Recirculation lines
Nurse truck tanks	End Caps/Dead Zones
Agitation pumps	Pump
In-line filters/screens	Outside surfaces of the sprayer

\*Be sure to take extra care when re-filling water supply tanks. Using hoses that have not been rinsed to re-fill clean water tanks can hold enough dicamba to contaminate water supply tanks.

\*\*Be sure to actuate all valves and solenoids during each rinse to ensure all of the plumbing is rinsed thoroughly. Don't forget the inductor as a point of contamination if used to mix the load.



To learn more about Engenia herbicide, visit [engeniastewardship.com](http://engeniastewardship.com)

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## Basic Procedure for Spray System Cleanout

1. Drain tank of all remaining spray solution
2. Begin first rinse using water
  - Rinse all parts of spray system plumbing thoroughly
  - Ensure all surfaces are visually clean
  - Clean all screens, pumps, hoses, end caps, recirculation lines, etc.
  - Actuate all solenoids and valves to ensure clean water flows through all lines
  - Drain all rinsate†
3. Begin second rinse using water and a *detergent based commercial tank cleaner*
  - Fill all lines, screens, strainers, plumbing, etc. with detergent and water solution
  - Allow cleaning agent to sit in all plumbing for at least 15 minutes or as advised by the label of the cleaner
  - Flush the solution through the entire system and drain excess rinsate†
4. Begin third rinse process using water
  - Rinse tank walls and fill all plumbing
  - Allow water to flow through the entire system thoroughly prior to draining rinsate†
5. Record spray cleanout procedure and date as required by U.S. EPA Engenia herbicide label

†Dispose of rinsate according to state requirements.



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**Engenia Herbicide is a US EPA Restricted Use Pesticide.**

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