



We create chemistry

Engenia®

Herbicide

Spray system hygiene.

Comprehensive cleaning is crucial.



Non-dicamba-tolerant soybeans are extremely sensitive to dicamba even at low doses. In fact, symptomology can occur to sensitive soybeans with as **little as 3 ml of formulated product OR 355 ml 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.

How temperature inversions form.

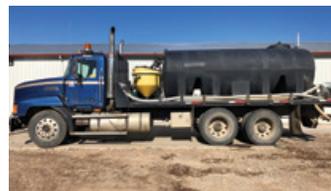
During daytime hours, dry air naturally cools with higher altitude. Solar radiation warms the earth's surface and, during days with little cloud cover, convection creates winds and gusts that transport air vertically. As sunset nears, the earth's surface is no longer heated by the sun. As a result, the ground and the air adjacent to the ground begins to cool more rapidly than parts of the overlying

atmosphere. Heat from the warmer air is transferred back to the soil, creating a layer of cooler, denser air near the soil surface. This process creates a temperature inversion, where the cool air at ground level has warmer air above it through the very lowest levels of the atmosphere

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 transferred by case or bulk to chem handler.



The herbicide in the chem handler is then pumped through a 50-foot hose into the sprayer.



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 mixing and loading setup is different, there are some common contamination points that need to be cleaned with a triple rinse prior to and after using Engenia.

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.

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.

[†] Dispose of rinsate according to label requirements.

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For more information, contact **AgSolutions®** Customer Care or visit **agsolutions.ca**.



Always read and follow label directions.

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