

## CALIBRATING FOR TOPGUARD™

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\*\*\***(NOTE)** If you are using a sprayer/planter with an automatic spray rate controller, the controller will automatically maintain the spray rate (in gallons per acre) you set it to during speed changes. It does so by changing operating pressure, which in turn adjusts the nozzle flow rate. Therefore, set the spray rate controller to desired spray rate (gallons/acre) and move to Step 5.

### Sprayer Calibration Using the 1/128th Method

This method uses a table to find a spraying area equal to 1/128th of an acre. Flow in ounces is collected for the time required to travel 1/128th of an acre. Because a gallon is 128 ounces and the treated area is 1/128th of an acre, ounces collected = gallons per acre.

Step 1. Make sure selected nozzles produce the correct spray pattern. Nozzles should be in good working order and be positioned to obtain a uniform coverage over the target area. An 80 degree even flow flat fan nozzle (example: Teejet 8001EVS) should be approximately 3-4 inches above the soil to achieve a 5-inch band. A T-band is applied perpendicular to the row direction after furrow opening and seed placement, but before furrow closure. Total volume per acre should be 4-6 gallons per acre. (See **Figures 1 & 2**)

Step 2. Use the accompanying **Table 1**. to select the calibration distance. For typical skip row patterns (2 planted rows and one out) use the spacing (in.) between planted rows.

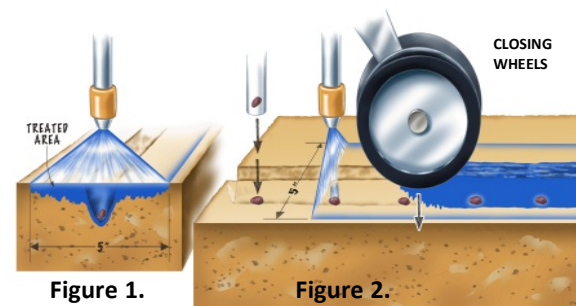


Figure 1.

Figure 2.

Figures courtesy of Cheminova Inc.

**Table 1.** Calibration distances for different planter row spacings.

Planter Row Unit Spacing (in.)	Calibration Distance (ft)
40	102
38	107
36	113
30	136

Step 3. Measure off the distance in the field to be sprayed from Step 2. Check the number of seconds the planter takes to cover this distance in the gear and at the throttle setting selected for planting. Make several runs over the distance and average the time it takes. Mark the throttle setting.

Step 4. With the rig standing still, engage the sprayer and set the throttle at spraying position. Set the sprayer pressure within the range recommended for the nozzles used.

Timed collection: Collect the spray solution from one nozzle (one row) for the time recorded in Step 3. **The amount collected in fluid ounces equals gallons per treated acre directly.**

**Example 1.** Calibration for 40 in. spacing

Step 1. Calibration distance = 102 feet

Step 2. Time for planter to travel 102 feet is 15 seconds (4.6 mph)

Step 3. Total flow from one nozzle for 15 seconds = 5 fluid ounces

**Calibration = 5 gallons per treated acre.**

Step 5. Once calibrated, take the volume of tank size and divide by the number of gallons per treated acre. This gives the number of acres treated per tank.

**Example 2.** 200 gallon tank divided by 5 gallons per treated acre = 40 treated acres per tank.

Step 6. From the label, determine the amount of Topguard (a.i. Flutriafol) needed for the acreage to be sprayed. Add the Topguard to a tank partially filled with carrier (water, fertilizer, etc.). Then, while continuously agitating, add additional carrier to reach the desired level. Be sure to follow all the label mixing instructions including a pre-mixing compatibility test.

**Example 3.** Rate = 1 quart (32 fl. oz.)/acre. 40 treated acres per tank times 1 qt./acre = 40 quarts per tank

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