

Applying Imidacloprid 2F (21.4 or 22.6% Flowable) by Nu-Arbor 1-Two Root Injector

The Nu-Arbor injector holds up to 4 gallons of fluid and dispenses a standard 1/4 ounce of fluid with each stroke.

Step 1. Judge whether the soil moisture level is moderate to wet or dry to normal. If you're in doubt about soil moisture level, you should default to the "Moderate to Wet Soil" instructions.

Step 2. To make a master batch of treatment mixture, follow the proportions of water and amount of product shown in the Mixing chart below. Put the water and chemical in a mixing container and shake well.

| MIXING | | |
|-------------------|--|---|
| Amount of Product | Amount of Water for Moderate to Wet Soil | Amount of Water for Dry to Normal Soil |
| 1 fl oz | 2.5 fl oz Each fl oz of this mixture contains 2 grams of active ingredient. | 6 fl oz Each fl oz of this mixture contains 1 gram of active ingredient. |
| 8 fl oz | 20 fl oz | 48 fl oz |
| 16 fl oz | 40 fl oz | 96 fl oz (3 qts) |
| 32 fl oz | 80 fl oz | 192 fl oz (1 gal + 2 qts) |
| 48 fl oz | 120 fl oz (almost 1 gallon) | 288 fl oz (2 gal + 1 qt) |
| 64 fl oz | 160 fl oz (1 gal + 1 qt) | 3 gallons |
| 1 gallon | 320 fl oz (2 ½ gallons) | |

Step 3. Measure the trunk diameter of the tree at breast height. This is called "inches dbh."

Step 4. Rake back any leaf litter, duff or debris from the base of the tree so that bare soil is accessible. At a distance of **no more than 12 inches from the base of the tree**, make one injector hole in the soil for each inch of trunk diameter. The holes should be evenly spaced around the tree and **no deeper than 2-4 inches**.
Note: For trees smaller than 4 inches in diameter, make a minimum of 4 shallow holes around the tree.

Step 5. Based on the trunk diameter, pump the injector handle the number of times shown in the Dosing chart below. **Be sure to stay in the same moisture level column as you used for mixing.**

| DOSING | | | |
|--|---|---|--------------------------------|
| Inches (DBH) | Strokes per Inch DBH for Moderate to Wet Soil | Strokes per Inch DBH for Dry to Normal Soil | Active Ingredient per Inch DBH |
| 1-11 | 1 stroke / hole | 2 strokes / hole | .5 gram |
| 12-18 | 1.5* strokes / hole | 3 strokes / hole | .75 gram |
| 19-22 | 2 strokes / hole | 4 strokes / hole | 1 gram |
| >22 should be treated two consecutive years. | 3 strokes / hole | 6 strokes / hole | 1.5 grams |

* To get the equivalent of 1.5 pumps per hole, do 1 pump in half the holes and 2 pumps in the other half, distributing these two levels evenly around the tree. Or do 1 ½ times the number of holes per inch DBH and do 1 pump per hole.

Step 6. When you're finished treating each tree, mark it to indicate it's been treated. When finished working, triple rinse injector as described in "Introduction to Treating Hemlocks."

CALL THE HEMLOCK HELP LINE 706-429-8010 WITH ANY QUESTIONS.

