

# Applying Safari 20 SG by Kioritz Soil Injector

The Kioritz soil injector holds up to 96 ounces of fluid and dispenses 1/6 ounce of fluid per stroke when the calibration ring is set on the red number 5. One 12-ounce bottle of Safari 20 SG treats an average of 70 diameter inches; a 3-pound jug treats an average of 283 diameter inches.

<b>IMPORTANT</b>	<b>CONVERSION FACTOR</b>
Use the <b>specialty marked measuring cup</b> that comes with your purchase of Safari to measure the required amount of product and a regular measuring cup to measure the amount of water. Note that the numbers printed on the special measuring cup refer to <i>ounces of weight</i> of Safari 20 SG and are <i>not</i> the same as <i>fluid ounces of volume</i> in a regular measuring cup.	If you don't have the special measuring cup, you can use a regular measuring cup with the following conversion factor for Safari 20 SG:  3.5 oz by weight in the Safari measuring cup = 6.25 oz. by volume in a regular measuring cup

**Step 1.** To make a master batch of treatment mixture, put the required amount of water in a mixing container first. **Warm water** works best. Then add the corresponding amount of product shown in the Mixing chart below and shake well.

MIXING		
▼ Amount of Product	Amount of Water	<b>Note:</b> This recommended mixing ratio is specifically for the Kioritz soil injector and has been updated to prevent clogging of the injector.
7 ounces	32 fluid ounces (1 qt)	
12 ounces	55 fluid ounces	
14 ounces	64 fluid ounces (2 qts)	
21 ounces	96 fluid ounces (3 qts)	
28 ounces	128 fluid ounces (1 gal)	

**Step 2.** Measure the diameter of the tree trunk at breast height (4.5 ft. above the ground). This is called “dbh.”

**Step 3.** Rake back any leaf litter, needle 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**. Injecting very close to the trunk, up against the big roots, and in the sinuses between the roots helps speed absorption.  
NOTE: For trees that are smaller than 4 inches in diameter, make a **minimum of 4 shallow holes** around the tree.

**Step 4.** Based on the trunk diameter, pump the injector handle the number of times shown in the Dosing chart below.

DOSING EACH TREE	
Inches (DBH)	Pumps per Inch DBH
1 – 15	3 pumps
16 – 19	4 pumps
20 – 23	5 pumps
24 - 27	6 pumps
28 – 31	7 pumps
32 – 35	8 pumps
36 – 39	9 pumps
40 or greater	10 pumps

**Step 5.** When you're finished treating each tree, mark it to indicate it's been treated. When finished working, **triple rinse the injector** as described in “Introduction to Treating Hemlocks” and store it upside down.

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

