

# IMIDACLOPRID QUICK REFERENCE INSTRUCTIONS – Kioritz & Soil Drench

**NOTE: It is the user's responsibility to read and follow the label instructions when using pesticide materials**

MIXING				
Imidacloprid Product	Ratio of Water to Product for Moderate to Wet Soil		Ratio of Water to Product for Dry to Normal Soil	
	21.4% 2F or 22.6% 2L	1 . 3 oz water per 1 oz product		3 . 6 oz water per oz product
75% WSP (1.6 oz)	<del>12 oz water per 1 . 6 oz packet</del>		24 oz water per 1 . 6 oz packet	
75% WSP (2.25 oz)	<del>16 oz water per 2 . 25 oz packet</del>		32 oz water per 2 . 25 oz packet	
75% wettable powder	<del>7 oz water per 1 oz product</del>		14 oz water per oz product	
DOSING				
Inches in Diameter (DBH)	Dosage per Inch DBH for Moderate to Wet Soil		Dosage per Inch DBH for Dry to Normal Soil	
	Kioritz Pumps	Soil Drench	Kioritz Pumps	Soil Drench
1-11	1 pump	1/6 oz mixture	2 pumps	1/3 oz mixture
12-18	1 . 5 pumps*	1/4 oz mixture	3 pumps	1/2 oz mixture
19-22	2 pumps	1/3 oz mixture	4 pumps	2/3 oz mixture
>22 should be treated two years in a row.	3 pumps	1/2 oz mixture	6 pumps	1 oz mixture

If using a **Kioritz soil injector** with a **powdered product**, default to the **Dry to Normal** ratio

**Kioritz** calibration ring should be set on the red 5.

\*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. For more information, please call the Hemlock Help Line<sup>SM</sup> 706-429-8010 or visit [www.savegeorgiashemlocks.org](http://www.savegeorgiashemlocks.org).

## Kioritz Soil Injection

If applying a **powdered Imidacloprid product** by Kioritz soil injection, be sure to use the **Dry to Normal Soil** mixing and dosing column to prevent clogging the injector.

1. Make a batch of mixture according to Mixing chart above.
2. Measure tree trunk diameter at breast height (DBH).
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. Holes should be evenly spaced around the tree and no deeper than 2-4 inches. For trees smaller than 4 inches DBH, make a minimum of 4 very shallow holes as close to the tree trunk as possible.
4. Based on the trunk diameter, pump the injector handle the number of times shown in the Dosing chart above. Be sure to stay in the same moisture level column as you used for mixing.
5. 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."

## Soil Drench

1. Make a master batch of mixture according to Mixing chart above.
2. Measure tree trunk diameter at breast height (DBH).
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, use a piece of rebar to make one hole in the soil for each inch of trunk diameter. Holes should be evenly spaced around the tree and no deeper than 2-4 inches. For trees smaller than 4 inches DBH, make a minimum of 4 very shallow holes as close to the tree trunk as possible.
4. Treatment is done on an individual tree basis. Use the Dosing chart above to determine how many ounces of mixture the tree needs by multiplying its trunk diameter by the number of ounces shown in the appropriate Dosage column. Be sure to stay in the same moisture level column as you used for mixing.
5. Use a measuring cup to measure out exactly the required amount for the tree and pour it into a larger dispensing container. Then add more water (a gallon or more) to make it easier to distribute the material evenly around the tree.
6. Pour the mixture slowly into the holes to avoid runoff and be sure to use it all up on the intended tree. When you're finished treating each tree, mark it to indicate it's been treated. Give the treatment time to dry



before children or pets are allowed in the area.



Save Georgia's Hemlocks  
Hemlock Help Line<sup>SM</sup> 706-429-8010  
[www.SaveGeorgiasHemlocks.org](http://www.SaveGeorgiasHemlocks.org)

# SAFARI 20 SG QUICK REFERENCE INSTRUCTIONS – **Kioritz**, Soil Drench, & Trunk Spray

**NOTE:** It is the user's responsibility to read and follow the label instructions when using pesticide materials. Use **special measuring cup\*** to measure the product and a regular measuring cup to measure the water.

<b>MIXING</b>		
<b>Master Batch for <b>Kioritz Soil Injector</b></b>  6 oz product with 28 oz water 7 oz product with 32 oz water (1 qt) 14 oz product with 64 oz water (2 qts) 21 oz product with 96 oz water (3 qts)	<b>Master Batch for Soil Drench or Trunk Spray</b>  3 . 5 oz product with 32 oz water (1 qt) 7 oz product with 64 oz water (2 qts) 10 . 5 oz product with 96 oz water ( 3 qts) 14 oz product with 128 oz water (1 gal)	<b>Small Custom Batch for Soil Drench or Trunk Spray</b>  Use 2 oz. of water per diameter inch with amount of product indicated below.

<b>DOSING</b>			
Inches DBH	<b>Kioritz Soil Injector:</b> PUMPS per Inch DBH	Soil Drench or Trunk Spray from Master Batch: Oz. of MIXTURE per Inch DBH	Soil Drench or Trunk Spray from Small Custom Batch: Oz. of PRODUCT per Inch DBH
1 – 15	3 pumps	1 oz	0 . 1 oz = 3 grams
16 – 19	4 pumps	1 1/3 oz	0 . 133 oz = 4 grams
20 – 23	5 pumps	1 2/3 oz	0 . 167 oz = 5 grams
24 - 27	6 pumps	2 oz	0 . 2 oz = 6 grams
28 – 31	7 pumps	2 1/3 oz	0 . 233 oz = 7 grams
32 – 35	8 pumps	2 2/3 oz	0 . 267 oz = 8 grams
36 – 39	9 pumps	3 oz	0 . 3 oz = 9 grams
40 or more	10 pumps	3 1/3 oz	0 . 333 oz = 10 grams

**Note:** Apply Safari® 20SG from Feb 1 to Nov15. For more information, call 706-429-8010 or visit [www.savegeorgiashemlocks.org](http://www.savegeorgiashemlocks.org).

**\*Conversion Factor:** If you don't have the special measuring cup, you can use a regular measuring cup with the following conversion factor:  
8 fl. oz. in a regular measuring cup = 4 oz. by weight of Safari.

<b>Kioritz Soil Injector</b>	<b>Soil Drench</b>	<b>Basal Trunk Spray</b>
<ol style="list-style-type: none"> <li>1. Make a master batch of mixture according to Mixing chart above. Use special measuring cup for product and regular measuring cup for water.</li> <li>2. Measure trunk diameter at breast height (DBH).</li> <li>3. Rake back any leaf litter, needle duff or debris from base of tree so bare soil is accessible.</li> <li>4. Within 12" of base of tree, make 1 injector hole in soil per inch of trunk diameter. Holes should be evenly spaced around tree and no deeper than 2-4". For trees &lt;4" DBH, make a minimum of 4 very shallow holes as close to tree trunk as possible."</li> <li>5. Based on trunk diameter, pump injector handle the number of times shown in Dosing chart above.</li> <li>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."</li> </ol>	<ol style="list-style-type: none"> <li>4. Within 12" of base of tree, use rebar to make 1 hole in soil per inch of trunk diameter. Holes should be evenly spaced around tree and no deeper than 2-4". For trees &lt;4" DBH, make a minimum of 4 very shallow holes as close to tree trunk as possible.</li> <li>5. Treatment is done on an individual tree basis. Use Dosing chart above, figure how many ounces of mixture the tree needs by multiplying trunk diameter by number of ounces shown in Dosage column.</li> <li>6. Measure out required amount of mixture and pour it into a larger dispensing container. Then add more water (a gallon or more) to make it easier to distribute the material evenly around tree.</li> <li>7. Pour mixture slowly into holes to avoid runoff; use it all up on intended tree. When finished treating each tree, mark it to indicate it's been treated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make a master batch of mixture according to Mixing chart above. Use special measuring cup for product and regular measuring cup for water.</li> <li>2. Measure trunk diameter at breast height (DBH).</li> <li>3. Treatment is done on an individual tree basis. Using Dosing chart above, figure how many ounces of mixture the tree needs by multiplying trunk diameter by number of ounces shown in corresponding Dosage column.</li> <li>4. Measure out required amount of mixture and pour it into sprayer. Set sprayer on low pressure.</li> <li>5. Position nozzle 2 inches from trunk. From 5 ½ feet above ground down to root flare, spray very slowly to avoid back-splash and allow material to be absorbed into bark. Spray until sprayer is empty so you use all the mixture on intended tree.</li> <li>6. When you're finished treating each tree, mark it to indicate it's been treated.</li> </ol>





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