

3 mL Dosage

# Merit<sup>®</sup> Injectable

For injection into trees in nurseries, greenhouses, and interior and exterior landscapes, and in private, municipal, state, and national forested areas.

**ACTIVE INGREDIENT:**

Imidacloprid, 1-[[6-Chloro-3-pyridinyl(methyl)-N-nitro-2-imidazolidinimine . . . . . 17.1%

**OTHER INGREDIENTS** . . . . .

82.9%  
100.0%

EPA Reg. No. 432-1463-64014

EPA Est. No. 64014-FL-001

**STOP: Read the label before use.**

**Keep out of reach of children**

## CAUTION

FIRST AID	
<b>IF ON SKIN OR CLOTHING:</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF SWALLOWED:</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.	
<b>Note To Physician:</b> No specific antidote is available. Treat the patient symptomatically.	

**Distributed by:**

FLORIDA SILVICS, INC.  
(dba Tree Tech Microinjection Systems)  
950 SE 215<sup>th</sup> Avenue  
Morrison FL 32668 USA  
**(352) 528-5335**

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:**

Harmful if absorbed through skin. Harmful if swallowed. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wear long-sleeved shirt and long pants, socks, shoes, chemical-resistant gloves, and protective eyewear. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

**Personal Protective Equipment (PPE):**

Applicators and Other Handlers who handle this product must wear:

- Long-sleeved shirt and long pants
- Chemical resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber or natural rubber
- Shoes plus socks

Follow manufacturer's instructions for cleaning/maintaining personal protective equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## User Safety Recommendation

### User should:

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.
- Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact 1-800-334-7577 for emergency medical treatment information.

## ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming trees and shrubs.

**Do not formulate this product into other end-use products.**

## DIRECTIONS FOR USE

**It is a violation of Federal law to use this product in a manner inconsistent with its labeling.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

**Pesticide Storage:** Store in a cool, dry place and in such a manner as to prevent contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of reach of children, preferably in a locked storage area. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Environmental Science Emergency Response team for decontamination procedures or any other assistance that may be necessary. The Bayer Environmental Science Emergency Response Telephone No. is 1-800-334-7577 or contact Chemtrec at 800-424-9300.

**Pesticide Disposal:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**Container Disposal:** Do not empty microinjection units. Used microinjection units should be placed in the heavy-duty plastic bag which accompanies each carton of injector units. The bag must be properly sealed, placed into the original shipping carton, and returned freight prepaid for disposal to: Tree Tech Microinjection Systems, 950 S.E. 215<sup>th</sup> Ave., Morriston, FL 32668.

## APPLICATION TO TREES

Merit Injectable can be used to control a variety of insect pests of ornamental or forest trees. Pests controlled include aphids, whiteflies, soft scales, adelgids, leafhoppers, lace bugs, mealy bugs, psyllids, leaf-feeding beetles, sawflies, borers, and leaf mining flies, beetles and wasps. Merit Injectable also can be used for suppression of thrips and armored scales. Merit Injectable can be used as directed on ornamental trees in residential areas, business and office complexes, shopping complexes, multi-family residential complexes, golf courses, airports, cemeteries, parks, playgrounds, and athletic fields. Merit Injectable also can be used in commercial forestry production, nurseries, greenhouses, and in state, federal, county and local recreational forests.

The active ingredient in Merit Injectable has sufficient residual activity so that applications can be made preceding the attack of the trees by target pests. Merit Injectable also controls existing infestations of most labeled pests; control of existing infestations of borers and other difficult-to-control pests can be achieved if the level of infestation is not excessively severe at the time of application. If the level of infestation is severe, the high label rate for the targeted pest is recommended.

Systemic activity occurs only after the active ingredient is translocated upwards in the tree. In some cases, translocation can take 10 days or longer, depending on the transpiration rate of the treated plant.

The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. For best results (i.e., to ensure uptake), application should be made when the tree is actively transpiring.

**NOTE:** Not for use on trees where the fruits and/or nuts are consumed. Do not apply more than once per year per tree.

## GENERAL DIRECTIONS

Applying Merit Injectable using the Tree Tech microinjection system:

### Installing Microinjection Units:

1. Determine the number of microinjection units to be installed based upon 1) the target insect pest(s), and 2) the registered dosage rate as administered by proper spacing of microinjection units around the stem circumference. Unless otherwise noted, microinjection units should be installed in the stem and root flares every 6 inches around the trunk near the ground line, i.e., 6.0-to-8.0 inches (15-to-20 cm) from the soil surface.

2. Using a portable electric drill (600-800 rpm capacity is preferred) with a sharp, clean 11/64-in. (0.4-cm) bit, the installer should drill a hole at the correct stem circumference spacing to a depth of 1/4-to-1/2 in. (0.60-to-1.3 cm) into the wood (xylem) under the bark. A slight downwardly angle is recommended for more complete drainage of the microinjection unit.

3. After reaching the proper depth range, the drill bit should be withdrawn carefully to avoid dislodging bark fragments around the exterior opening of the hole. The rear barrel portion of the microinjection unit should be compressed partially (about 1/2 in. or 1/3 cm.). The microinjection unit should be inserted into the hole and the rear barrel portion compressed further without engaging the locking mechanism and barrel segments. Placing the plastic installation cap over the rear barrel end, strike the cap with a plastic hammer to seat the microinjection unit firmly in the hole. If the microinjection unit is not properly positioned in the hole, strike the cap again until correctly seated. By striking the microinjection unit, the back end of the feeder tip is forced back into the funnel-shaped section dislodging a septum that allows the Merit Injectable solution to flow from the microinjection unit into the tree.

4. When the microinjection unit is positioned correctly in the tree and the internal septum is dislodged to permit the flow of Merit Injectable, remove the cap and, if necessary, push the rear barrel portion of the unit further downwardly until it is flush with the edge of the locking mechanism. This engages the locking mechanism that pressurizes the microinjection unit and assists in the evacuation of Merit Injectable from the microinjection unit and movement into the vascular system of the tree.

5. Each hole should be drilled and a microinjection unit installed without delay. After the unit is properly seated, it should be activated. This sequence minimizes the flow of tree sap or resin into the hole prior to uptake of Merit Injectable.

When properly installed, the microinjection unit generates internal pressure resulting in the flow of Merit Injectable through the dispenser tube. The microinjection unit must never be activated unless installed correctly and securely in the tree to be treated.

Occasionally microinjection units containing Merit Injectable may require up to several hours or more to empty depending on the health of the treated tree and local weather conditions. Never assume that microinjection units have depressurized completely because they appear nearly empty or empty. The individual should then cover the microinjection unit with one hand near the point of insertion into the stem while grasping the barrel end of the microinjection unit with the other hand. The injector should be turned slightly as it is slowly withdrawn from the tree. Careful removal of microinjection units should prevent accidental spillage of Merit Injectable and subsequent exposure to the installer.

RECOMMENDED APPLICATIONS	
Trees and shrubs (greater than 2" diameter or 6.25 inches circumference, at chest height) For bee-pollinated dicotyledonous trees, applications should be made post-bloom.	
Pest	Dosage
Adelgids Aphids Japanese beetle adults Lace bugs Leaf-feeding beetles (including elm and viburnum leaf beetles) Leafhoppers Leafminers Mealy bugs Psyllids Soft scales Thrips (suppression) Whiteflies	One Merit Injectable microinjection unit per 2-4 inches of cumulative trunk diameter (6.25-12.5 inches of circumference) at chest height (54 inches from ground). Space injection holes equidistantly around the circumference of the tree
Armored scales (suppression) Roundheaded borers (incl. Eucalyptus longhorned borer) Flatheaded borers (including bronze birch borer and alder borer) Pine tip moth Royal palm bug Sawfly larvae	One Merit Injectable microinjection unit per 2 inches of cumulative trunk diameter (6.25 inches of circumference) at chest height (54 inches from ground). Space injection holes equidistantly around the circumference of the tree

For trees greater than 12" diameter (37.5 inches circumference), or if trees are already infested, the highest label rate specified for control of targeted pests is recommended (i.e., one capsule for every 2 inches of trunk diameter, or 6.25 inches of trunk circumference). For trees larger than 24 inches diameter (75 inches circumference) always use the 2-inch diameter spacing (6.25 inches circumference) for the targeted pest.

## RESTRICTIONS

Do not use on fruit or nut trees intended for food uses.

## IMPORTANT: READ BEFORE USE

Read the entire Directions for use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following conditions, disclaimer of warranties and limitations of liability.

**CONDITIONS:** The directions for use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Tree Tech Microinjection Systems' control it is impossible for Tree Tech Microinjection Systems to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

**DISCLAIMER OF WARRANTIES:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, TREE TECH MICROINJECTION SYSTEMS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Tree Tech Microinjection Systems is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. Tree Tech Microinjection Systems disclaims any liability whatsoever for special, incidental or consequential damages, resulting from the use or handling of this product.

**LIMITATIONS OF LIABILITY:** TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT TREE TECH MICROINJECTION SYSTEMS ELECTION, THE REPLACEMENT OF PRODUCT.

**NET CONTENTS:** 300 mL (3 mL x 100 microinjection units/box) or 10.15 fl. oz.  
150 mL (3 mL x 50 microinjection units/box) or 5.07 fl. oz.

TREE TECH Reg. TM of Florida Silvics. Inc.