



# DINOCIDE®

SYSTEMIC INSECTICIDE  
FOR TREE INJECTION USE  
IN READY TO USE CAPSULES FOR FOREST, PARK,  
LANDSCAPE, AND ORNAMENTAL TREE USE

MFG. BY: J.J. MAUGET CO.  
TOWN, STATE: Arcadia, CA 91006  
EPA REGISTRATION NO: 7946-35  
EPA ESTABLISHMENT NO: 7946-CA-1  
E-MAIL ADDRESS: www.Mauget.com

**ACTIVE INGREDIENT:**  
\*Dinotefuran..... 12%  
**OTHER INGREDIENTS:**..... 88%  
Total 100%  
\*N-methyl-N'-nitro-N'-[(tetrahydro-3-furanyl)methyl]guanidine

## KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
<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 a poison control center or doctor.</li> <li>Do not give anything to an unconscious person.</li> </ul>
<b>IF ON SKIN</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 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.</li> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
<b>HOT LINE NUMBER</b>	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-535-5053 for emergency treatment information.	

### Net Contents:

\_\_\_\_\_ 288 capsules @ 4mL or (0.135 fl. oz.) each, 1152 mL or (38.95 fl. oz.) net; 288 feeder tubes

- 24 capsules plus 24 feeder tubes per carton.
- \_\_\_\_\_ 24 capsules @ 2mL, 48 mL net, or
- \_\_\_\_\_ 24 capsules @ 3mL, 72 mL net, or
- \_\_\_\_\_ 24 capsules @ 4mL, 96 mL net, or
- \_\_\_\_\_ 24 capsules @ 6mL, 144 mL net
- \_\_\_\_\_ Shipping box: 12 Cartons as above.

### NOTICE OF WARRANTY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, J.J. MAUGET CO. MAKES NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PURPOSE OR OTHERWISE, EXPRESSED OR IMPLIED CONCERNING THIS PRODUCT OR ITS USE WHICH EXTEND BEYOND THE USE OF THE PRODUCT UNDER NORMAL CONDITIONS IN ACCORD WITH THE STATEMENTS MADE ON THIS LABEL.

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as polyethylene or butyl rubber
- Shoes plus socks

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

### CHEMICAL HAZARDS

Do not mix or allow contact with water or oxidizing agents. Hazardous chemical reactions may occur.

### ENVIRONMENTAL HAZARDS

This pesticide is 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 apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not dispose equipment washwaters or rinsate into a natural drain or water body.

This product is toxic to honey bees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honey bee larvae and the eventual instability of the hive.

This product is toxic to bees exposed to treatment for more than 38 hours following treatment.

Do not apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities.

Dinotefuran and its degradate, MNG, have the properties and characteristics associated with chemicals detected in ground water. The high water solubility of dinotefuran, and its degradate MNG, coupled with its very high mobility, and resistance to biodegradation indicates that this compound has a strong potential to leach to the subsurface under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Periodic monitoring of shallow groundwater in the use area is recommended.

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

FPL: 05/23/16

## DIRECTIONS FOR USE

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.

READ ENTIRE LABEL, USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.

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 requirement specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and the handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls,
- Shoes plus socks, and
- Chemical-resistant gloves.

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

### RESTRICTIONS

Do not inject trees that are less than two inches in diameter (6 inches in circumference). This product is not to be used on trees which will produce food within the year following treatment unless food crop on treated tree is discarded and destroyed.

For hardwood or deciduous trees, follow the standard injection spacing of every 6 inches of circumference (DBH/2). For narrow leaved evergreens such as pine, fir or spruce, reduce the spacing to every 4 inches of circumference (DBH/1.3) for better canopy distribution.

Do not apply this product, by any application method, to linden, basswood or other Tilia species.

Do not apply this product more than one time per year.

### USE DIRECTIONS

DINOCIDE is for use on trees in: forests, woodlands, residential settings, median strips, roadways, Christmas tree farms, ornamental landscapes, parks, and cemeteries.

#### Timing of Application:

Preventive applications approximately 2 weeks prior to anticipated feeding damage will provide good management. DINOCIDE can also be used after damage has occurred against listed insect pests that produce large amounts of feeding debris. Focus treatment on the most susceptible injury stage of the target

#### Combination Treatments:

When treating for beetles that carry fungi (ambrosia), an additional treatment of fungicide may improve management strategies. Materials to consider are fungicides labeled for use against vascular-inhabiting fungi.

DINOCIDE may be applied in combination with other Imidacloprid insecticides such as Imicide, where control longer than 16 weeks is desired. DINOCIDE is also compatible with Abacide 2 and may be combined for a more broad-spectrum treatment.

#### Application and Use:

To account for trunk flare, place injection sites evenly (every 6-8 inches) around the base of the root flare within 6 to 8 inches of the root crown. For treatment of pinewood wilt nematode, space injection sites every 4 inches of circumference. For pines and other resinous conifer species, injection sites may be higher up on trunk (see Step 5 below). Follow good injection practices. Disinfect drill bit prior to use on each tree.

#### 1. The MAUGET SYSTEM

- (A) Mauget compressible micro-injector with insert hole
- (B) Feeder tube with flanged gun-sight and opposite tapered beveled end

**2. TOOLS**

- (A) Portable electric drill
- (B) 1 1/64 in. (0.4 cm) drill bit
- (C) Optional soft headed mallet or hammer
- (D) Tape measure
- (E) Insertion tool (optional)

**3. NUMBER OF MICRO-INJECTORS**

Measure the tree at chest height in inches. If measuring the circumference, divide this number by six (6) to determine the number of micro-injectors needed. If measuring the diameter at breast height (DBH), divide this number by 2 (two) to determine the number of micro-injectors capsules needed. If the number of micro-injectors results in a fraction, round down to the lower whole number.

The following dosage, per capsule, depends on tree diameter:

- 2mL capsules – 2 to 10 inches DBH
- 3mL capsules – 10 to 36 inches DBH
- 4mL capsules – 36 inches DBH and above.
- 6mL capsules – narrow-leaved evergreen trees 24" DBH and above.

For heavier infestation and/or more persistent insects, use 4 mL capsules on all tree sizes. For narrow-leaved evergreen trees such as pine, spruce, or hemlock > 24" DBH, use the 6mL capsules at 4-inch circumference spacing (DBH divided by 1.3). Trees in advanced stages of insect infestation may not respond to treatment. The health, species of the tree and the environmental conditions will determine the rate of uptake.

For palms and other monocotyledons, when using multiple injection sites, alternate drilling depth to capture scattered vascular bundles, taking care that the depth of any single site is less than 1/3 the diameter of the tree. If using a single injection site, one feeder tube can be used to administer the contents of all capsules. Injection sites may be covered with Lac Balsam or similar for aesthetic purposes.

**4. PRESSURIZING THE MICRO-INJECTOR**

Apply the appropriate amount of pressure on the top of the micro-injector capsule in order to compress.

**5. DRILLING THE TREE HOLE**

Drill the hole deep enough to allow the vascular system to transport DINOCIDE throughout the tree. Make injection holes at least 1/2 to 3/4 inch into healthy xylem (white wood) up to a depth of 2 inches from the outer trunk surface depending upon the tree species and outer bark thickness. For conifer species with high resin pressure during the growing season, place injection sites higher on the trunk (36 – 48") and to a depth of up to 2 inches where tree diameter allows.

**6. COMBINING MICRO-INJECTOR AND FEEDER TUBE**

Several methods of combining the micro-injector capsule with the feeder tube are acceptable including placing by hand, the feeder tube's flange end, with the flange notch upward, into the micro-injector capsule insert hole of a compressed upright capsule. Push the flange end of the feeder tube flush with the membrane located at the inner end of the insert hole.

**7. PLACING THE FEEDER TUBE IN THE TREE**

Firmly seat the beveled, dispensing end of the feeder tube, with the attached upright micro-injector capsule, into the predrilled tree injection hole. Tap the rear side, opposite the insert hole of the micro-injector capsule either with an optional mallet, hammer or push forward with the palm of your hand. This action will simultaneously seat the feeder tube in the injection hole while breaking the micro-injector capsule membrane for releasing the capsule contents into the feeder tube and into the tree. Another method is to place the feeder tube in the predrilled hole of the tree using the optional insertion tool. Then place the compressed micro-injector capsule onto the feeder tube in place.

**8. REMOVAL**

Uptake in the tree usually occurs within several minutes. Micro-injector capsules may be temporarily rotated in place to see if any liquid is left. When empty, turn the capsules upside down for one minute before removal. Applicators must remove micro-injectors promptly after treatment. Empty micro-injector capsules must not be left on the tree. The health and species of the tree, and local environmental conditions will determine the rate of uptake. If the capsule does not completely empty within a few hours, invert and carefully remove the micro-injector capsule and enclose it in a heavy duty plastic bag for disposal in accordance with state and local regulations.

**9. MINI-MICRO FEEDER TUBE**

For established trees with thin bark (less than 3/8 in. thickness), use a 7/64 in. drill bit to produce a micro-injection site for a mini-micro feeder tube. The Mini-Micro Insertion tool may be used.

**10. MINI-MICRO INSERTION TOOL**

Because the 7/64 in. mini-micro injection site is so small, insert the mini-micro insertion tool pin into and through the mini-micro feeder tube and place the combination into the injection site. The insertion pin prevents plugging of the feeder tube and provides a clear pathway to the cambium tissue. Be sure to place the feeder tube with the flange notch up. The insertion tool is removed from the mini-micro feeder tube and the micro-injector capsule is secured to the feeder tube by sliding the inlet hold over the flange end of the tube. The system is activated by applying a force to the micro-injector capsule as previously described in Step 8.

<b>TARGET INSECTS ON FOREST, PARK, LANDSCAPE, PALM, AND ORNAMENTAL TREES</b>
<b>ADELGIDS</b>
<b>APHIDS</b>
<b>BLACK VINE WEEVIL ADULT</b>
<b>BRONZE BIRCH BORER</b>
<b>COTTONWOOD LONGHORNED BORER</b>
<b>DOUGLAS FIR GALL MIDGE</b>
<b>DOUGLAS FIR CONE MOTH LARVAE</b>
<b>ELM LEAF BEETLE</b>
<b>EUCALYPTUS LONGHORNED BORER</b>

**FLATHEADED BORER (including Alder Borer and Birch Borer; excluding Emerald Ash Borer)**  
**JAPANESE BEETLE**  
**LACEBUGS**  
**LEAFHOPPERS**  
**LEAFMINERS**  
**MEALYBUGS**  
**PINE TIP MOTH LARVAE**  
**PSYLLIDS (including Lerp Psyllid)**  
**ROYAL PALM BUGS**  
**SCALE INSECTS (armored and soft, including Asian Cycad Scale)**  
**SPRUCE BUDWORM**  
**THRIPS**  
**WHITEFLIES**

## **STORAGE AND DISPOSAL**

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

**PESTICIDE STORAGE:** Keep pesticide in original container. Store micro-injector capsules in an upright position, above 45°F, in a cool, dry place.

**PESTICIDE DISPOSAL:** Waste resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER HANDLING:** Offer for recycling, if available, or dispose of in a sanitary landfill, or by incineration if approved by state and local authorities. Do not burn unless allowed by state and local ordinances. If burned, stay out of smoke.