

®  
**Mauget**

# DINOCIDE HP ®

SYSTEMIC INSECTICIDE  
FOR TREE INJECTION USE  
IN LIQUID LOADABLE INJECTORS

MFG. BY:  
TOWN, STATE:  
EPA REGISTRATION NO:  
EPA ESTABLISHMENT NO:  
E-MAIL ADDRESS:

J.J. MAUGET CO.  
Arcadia, CA 91006  
7946-34  
7946-CA-1  
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>IF INHALED</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</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:**

- \_\_\_\_\_ 1 bottle @ 33.81 fl. oz. (1 liter)
- \_\_\_\_\_ 4 bottles @ 33.81 fl. oz. (1 liter) ea.; 1 gal., 7.3 fl. oz. (4 liters) net
- \_\_\_\_\_ 1 bottle @ 16.9 fl. oz. (500 ml)
- \_\_\_\_\_ 4 bottles @ 16.9 fl. oz. (500 ml) ea.; 2 qts., 3.6 fl. oz. (2 liters) net

*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
- Protective eyewear

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.

## 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.

## PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix or allow contact with water or oxidizing agents. Hazardous chemical reactions may occur.

## **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.

## **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.
- Protective eyewear

## **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.

## **APPLICATION EQUIPMENT**

DINOCIDE HP is a solvent-based insecticide for use with liquid loadable injectors. Test DINOCIDE HP compatibility with the injector and its liquid contact components before regular use. Clean the interior of the injector with a solvent cleaner to remove any residual liquid prior to use. Disinfect tree injector tips between each tree injection. Applicators should use liquid loadable injector equipment/devices with care and in a safe manner in addition to following each manufacturer's directions and precautions.

## **DIRECTIONS**

DINOCIDE HP insecticide is for use in forests, woodlands, residential settings, median strips, roadways, Christmas tree farms, ornamental landscapes, parks, and cemeteries. DINOCIDE HP may also be used in commercial or residential landscapes, interior and exterior plantscapes, and other areas where ornamental trees and woody shrubs are grown. Make applications prior to pest appearance or after they are observed.

**Timing of Application:**

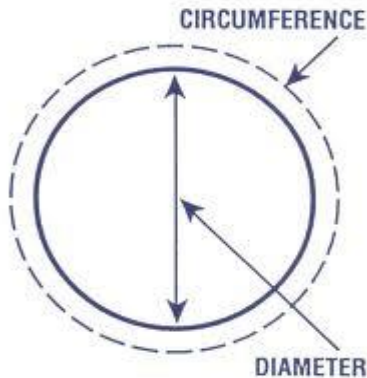
Preventive applications approximately 2 weeks prior to anticipated feeding damage will provide good management. DINOIDE HP can also be used after damage has occurred against listed insect pests that produce large amounts of feeding debris. Focus treatment on the most susceptible injury stage of the target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

**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.

**Number of Micro-Injection Sites:**

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

**Dosage:**

Use the following dosage, depending on tree diameter:

- 1.0 mL per inch DBH for trees 2 to 10 inches DBH or 2 mL per injection site every 6 inches of circumference
- 1.5 mL per inch DBH for trees 10 to 36 inches DBH or 3 mL per injection site every 6 inches of circumference
- 2.0 mL per inch DBH for trees 36 inches DBH or 4 mL per injection site every 6 inches of circumference
- 3.0 mL per inch DBH for narrow-leaved evergreen trees 24 inches and above or 6.0 mL per injection site, spaced every 4 inches of circumference (DBH/1.3)

For heavier infestations and/or more persistent insects, use the 2.0 mL per inch rate on all tree sizes for both hardwood and narrow-leaved evergreen trees. For narrow-leaved evergreen trees, use the closer injection interval of every 4 inches of circumference (DBH/1.3). Increase the dosage to 3.0 mL per inch with narrow-leaved evergreen trees 24 inches or greater in diameter. Trees in advanced stages of insect infestation may not respond to treatment. The health, species of tree, and environmental conditions will determine the rate of uptake.

**Drilling the hole:**

Depending on the specific type of applicator, it may be necessary to predrill holes prior to insertion of the applicator tip into the tree. Drill holes deep enough to allow the tree's vascular system to transport DINOIDE HP throughout the tree. Make injection holes at least  $\frac{1}{2}$  to  $\frac{3}{4}$  inch into healthy xylem (white wood) with actual depth up to 2 inches or more from the outer trunk surface depending upon the tree species and outer bark thickness. For conifer species with high resin pressure, place injection sites higher on the trunk (36-48") and to a deeper drill depth of 2+ inches

**Application and Use:**

Set the injector for the appropriate amount of DINOIDE HP per site and pressurize the injector. 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 above). Follow good injection practices. Disinfect drill bit prior to use on each tree.

**Uptake Time:**

Uptake time in the tree usually occurs within several minutes to an hour dependent upon species of tree, soil moisture availability, and the type of tree injector.

**TARGET INSECTS  
ON FOREST, PARK, LANDSCAPE, PALM, AND ORNAMENTAL  
TREES**

**ADELGIDS**  
**APHIDS**  
**BLACK VINE WEEVIL ADULT**  
**BRONZE BIRCH BORER**  
**COTTONWOOD LONGHORNED BORER**  
**DOUGLAS FIR GALL MIDGE**  
**DOUGLAS FIR CONE MOTH LARVAE**  
**ELM LEAF BEETLE**  
**EUCALYPTUS LONGHORNED BORER**  
**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 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:** Nonrefillable container. Do not reuse or refill this container. 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.