

69117-3

07/30/2002

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SHEPHERD™ Fungicide

For Systemic Fungicide Suppression of Selected Diseases in Trees ✓

Active Ingredient:
 Propiconazole (CAS No. 60207-90-1) 14.3% ✓
Other Ingredients 85.7% ✓
 Total 100.0%
 Contains 14 grams (0.5 oz.) active ingredient per 120 ml (4 oz.) bottle ✓

Keep Out of Reach of Children
WARNING
 See below [outset] for additional [complete] precautionary statements. ✓

ACCEPTED

JUL 30 2002

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 69117-3

Net Contents: 4 oz. (120 ml) ✓

EPA Reg. No. 69117-3 EPA Est. _____ ✓

[Sold by]
ArborSystems, LLC
 P.O. Box 34645
 Omaha, NE 68134

PRECAUTIONARY STATEMENTS

Hazards to Humans & Domestic Animals

WARNING: Causes substantial but temporary eye injury. Wear goggles or face shield. Causes skin irritation. Do not get in eyes, on skin or on clothing. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing vapor. Wear rubber or neoprene gloves when handling this product. Thoroughly wash with soap and water after handling. Remove and wash contaminated clothing before reuse. ✓

First Aid

If in Eyes	<ul style="list-style-type: none"> Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. ✓ Call a poison control center or doctor for treatment advice.
If on Skin or Clothing	<ul style="list-style-type: none"> Take off contaminated clothing. Immediately rinse skin with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
If Swallowed	<ul style="list-style-type: none"> Immediately call a poison control center or doctor for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If Inhaled	<ul style="list-style-type: none"> Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-698-4641 for emergency medical treatment information.

Note to Physician: If ingested, lavage stomach to avoid aspiration. A slurry of activated charcoal in water can be left in the stomach. Give a saline laxative and supportive therapy.

{Note: The First Aid statements' grid format will be used if market label space permits; otherwise a paragraph format will be used.}

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Environmental Hazards

This product is toxic to fish. Do not apply directly to water, 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.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

For assistance, contact ArborSystems at 402-339-4459.

DIRECTIONS FOR USE

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

Storage and Disposal

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

Storage: Store in a tightly closed container in a cool, dry place away from heat or open flame and in such a manner as to prevent cross contamination with fertilizers, food, feed and other pesticides. Store in original container out of reach of children, preferably in a locked storage area. **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:** Triple rinse (or equivalent) then dispose of in an incinerator or landfill approved for pesticide containers. Do not reuse empty container; wrap and put in trash.

GENERAL INFORMATION

ArborSystems Tree Injection System using the Patented Wedge™ Tip and Patented WedgeChek™

The ArborSystems Tree Injection System injects pesticides or micronutrients into a tree with minimal wounding. The system will inject chemicals into the area of bark separation where the chemical can be actively transferred to other parts of the tree. Spring through late summer is the ideal time for injection. Injections made during the spring or summer will be more successful than waiting until the fall. Specifically, each tree needs to be inspected. The bark needs to be pliable and that depends upon local weather conditions.

Shepherd™ Fungicide is a systemic fungicide for use as an injection for prevention and treatment of (1) oak wilt (*Ceratocystis fagacearum*) of Oak (*Quercus* spp.), (2) Dutch elm disease (*Ceratocystis ulmi*) of Elms (*Ulmus* spp.), (3) sycamore anthracnose (*Apiognomonia veneta*), and (4) leaf diseases (i.e., *Venturia inaequalis*, *Gymnosporangium juniperi-virginianae*, *Pucciniastrum goeppertianum*, etc.) of Crabapple (*Malus* spp.).

These fungi infect the vascular system and cause plugging throughout the tree. It is recommended that Shepherd™ Fungicide be administered by trained arborists or others trained in injection techniques and in the identification of Oak wilt and Dutch elm disease. When possible, Shepherd™ Fungicide should be injected into flare roots to ensure even distribution throughout the vascular system of the tree.

Important: Oak trees exhibiting less than 20% crown loss from Oak wilt will have the best chance of responding to treatment with by Shepherd™ Fungicide. Preventive application is more effective than therapeutic treatment in trees showing disease symptoms. Trees in advanced stages of disease development may not respond to treatment.

Trees exhibiting specific symptoms or symptomless trees immediately adjacent to a diseased tree should be considered infected. Symptomless trees separated by a primary plow line from diseased trees may be at less risk of infection. Do not use on sick plants or plants weakened by extreme environmental conditions such as heat, flooding, cold, etc.

How to Use the ArborSystems Tree Injection System

1. Use protective eyewear and rubber or neoprene gloves when handling or installing the ArborSystems Tree Injection System.
2. Remove the small tab on top of the bottle and Attach the chemical bottle of chemical to the SW100 Injector Gun.
3. Attach the Wedge™ Tip to the SW100 Injector Gun. Make sure the small hole in the tip is pointing straight up. Set the delivery volume on the syringe to 1 ml or ½ ml, as appropriate.
4. Determine the thickness of the bark. Insert the Wedge™ Tip into the fissure or valley of the tree. If the tip penetrates more than the length of a WedgeChek™ the injection will be made in the fissure. If the tip penetrates less than the length of a WedgeChek™ the injection will be made through the tight outer bark of the tree. On thin-barked trees you may find it necessary to insert the WedgeChek in only one-half as far as normal.
5. Insert the WedgeChek™ Punch into the tree. Rotate the punch to separate the core from the tree bark and Remove the punch and from the tree, squeeze the trigger to remove the bark core, and Examine the core to make sure the removed core that has been removed is approximately the same length as long as the WedgeChek™. Repeat this

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step while moving around the flare circumference of the tree. Be sure to follow the label directions on the chemical bottle this outsert to determine how many injection sites are needed on any given tree. Usually this is approximately 1 injection for every 3" to 5" 4 inches of trunk circumference measured at 4.5' above the ground. Make WedgeChek insertions around the flare of the tree spacing evenly.

6. Place Put the WedgeChek™ on the protruding pin on the bottom of the grip then insert the WedgeChek directly into the punched hole. The barbs on the WedgeChek will secure it in Wedgle™ Tip, prior to inserting the tip into the tree.
7. Using a straight motion Insert the Wedgle™ Tip with a straight motion through the WedgeChek. Make sure the hole in the tip passes completely through the WedgeChek into the tree until it stops against the wood. This will usually be about 1/2" on Elms, shorter on crabapple, oak and sycamore trees. As the tip is pushed into the tree, the Wedgle™ Tip cuts through the WedgeChek™ and the bark, the blunt-edged tip automatically stops when it reaches the wood.
8. With a smooth motion, firmly squeeze both handles at the same time. This motion allows the bark to separate and the chemical to be deposited into the area. The WedgeChek™ plugs the hole, allowing the chemical to remain in the tree.
9. Slowly withdraw the tip and repeat this step while moving around the circumference of the tree.
10. Move laterally and make the next injection until the entire tree trunk has been treated. After the tree has taken up the chemical each The WedgeCheks™ can either may be removed or left in the tree and used to inject the tree the following year.

Indications	Dosage	[[Illustrations of Injections Will Appear Here]]
Treatment of Oak wilt disease for an uninfected Live Oak (not including Red Oak).	3-5 ml per injection site* spaced every 3-4" around the tree measured at DBH	
Treatment of Dutch elm disease for an uninfected Elm or Oak other than Live Oak.	5-10 ml per injection site* spaced every 3-4" around the tree measured at DBH	
Treatment of leaf diseases in Crabapple. Do not use fruit from treated trees for food or feed purposes.	1-2 ml per injection site* spaced every 3-4" around the tree measured at DBH	
Treatment of Anthracnose in Sycamore.		

*The number of injection sites is based on 1 injection for every 3" to 5" of trunk circumference measured at 4.5' above the ground.

Retreatment

Record the level of disease in each tree prior to initial Shepherd™ Fungicide injection. Consider preventative applications 12 months after the initial injection. Reevaluate the disease level in all trees, particularly those in high disease risk areas or high-value trees, for possible retreatment 12 months after each treatment and/or on an annual basis.

Notes

1. Accurate diagnosis of Oak wilt and Dutch Elm disease is important, since Shepherd™ Fungicide provides only suppression of the diseases listed on this label.
2. Shepherd™ Fungicide will be most effective when used in conjunction with other cultural practices recommended for management of Oak wilt and Dutch Elm disease (removal of dead elm trees, pruning of diseased tree limbs and branches, control of bark beetles, etc.).
3. If difficulty in keeping all of the chemical in per site is encountered, mark this site and move on to the others. When finished moving around to the trees, return to the marked tree and add the required amount of chemical needed.

Notice of Warranty

ArborSystems, LLC warrants that this product conforms to the chemical description on the label and is reasonably fit for use under average conditions when used strictly in accordance with the directions on the labeling. ArborSystems, LLC does not make or authorize any agent or representative to make any other warranty, guarantee or representation, express or implied, concerning this product.

For assistance contact

ArborSystems, LLC

P.O. Box 34645 Omaha, NE 68134

Toll-Free: 1-800-698-4641 Phone: (402) 339-4459 FAX: (402) 339-5011

www.arborsystemsllc.com

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Shepherd™ Fungicide, Wedgle™ Tip and WedgeChek™ are registered trademarks of ArborSystems, LLC
Wedgle™ Tip is protected by U.S. Patent #5,239,773
WedgeChek™ is protected by U.S. Patent #5,797,215



[] denotes alternate/optional language
{ } denotes language that does not appear on the market label

