69117-3 05/27/2011 1/9

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

MAY 27 2011

ArborSystems, Inc.
% Mary Beth Endres
RegWest Company, LLC
8203 West 20th St., Suite A
Greeley, CO 80634-4696

Subject: SHEPHERD™ Fungicide
EPA Reg. No. 69117-3
Your amendment dated February 24, 2011
EPA Decision Number 368066

Dear Ms Endres:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act as amended is acceptable. This label supercedes all labels previously accepted for this product.

One copy of the label stamped "Accepted" is enclosed for your records. Please submit one copy of the final printed label before the product is released for shipment.

If you have any questions, please contact Robert Westin by phone at (703) 305-5721 or via email at westin.robert@epa.gov.

Sincerely,

Shaja Joyner

Shaja Joyner
Product Manager (20)
Fungicide Branch
Registration Division (7504P)

Enclosure:

SHEPHERD™ Fungicide

{Affixed Booklet – Front Panel}

SHEPHERD™ Fungicide
An ArborSystems™ Direct-Inject™ Chemical

For Systemic Fungicide Suppression of Selected Diseases in Ornamental Trees

Active Ingredient:	
Propiconazole (CAS No. 60207-90-1)	14.3%
Other Ingredients	85.7%
Total	100.0%

Contains 0.5 oz. (14 grams) active ingredient per 4 fl.oz. (120 ml) pack.
[Contains 4.25 oz. (117 grams) active ingredient per 1 qt. 2 fl.oz. (1000 ml) pack.]

Net Contents: 4 fl.oz. (120 ml)
[Net Contents: 1 qt. 2 fl.oz. (1000 ml)]

Keep Out of Reach of Children
WARNING
See inside for First Aid, additional Precautionary Statements and complete Directions for Use.

{Affixed Booklet}

SHEPHERD™ Fungicide
An ArborSystems™ Direct-Inject™ Chemical
Easy • No Drilling • Saves Time and Money

For Systemic Fungicide Suppression of Selected Diseases in Ornamental Trees

Intended for use by professional arborists/applicators, foresters, grounds maintenance professionals and landscapers.

To be used only with the ArborSystems Direct-Inject Tree Injection System

ArborSystems™
The No-Drill Injection Solution
800-698-4641 • Fax: 402-339-5011
P.O. Box 34645 • Omaha, NE 68134

Net Contents: 4 fl.oz. (120 ml)
[Net Contents: 1 qt. 2 fl.oz. (1000 ml)]

EPA Reg. No. 69117-3 • EPA Est. 69117-NE-1

ACCEPTED
MAY 27 2011
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg No. 69117-3

First Aid

If in Eyes	• 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	• 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	• 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	• 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.	
Note to Physician: If ingested, induce emesis or lavage stomach; treat symptomatically.	

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

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. Thoroughly wash with soap and water after handling. Remove and wash contaminated clothing before reuse.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for Category C on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate; butyl, nitrile and neoprene rubber; polyvinyl chloride (PVC); or Viton
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate; do not reuse them. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Immediately remove clothing if pesticide gets inside; then thoroughly wash and put on clean clothing.

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.

DIRECTIONS FOR USE

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

Intended for use by professional arborists/applicators, foresters, grounds maintenance professionals and landscapers.

Product Information
Do Not Inject Food Bearing Plants
The No-Drilling Injection Solution

ArborSystems™ Direct-Inject™ Tree Injection System

The ArborSystems™ Direct-Inject™ Tree Injection System is a no-drill trunk injection method and is easy to use. Most trees are treated in as little as five minutes or less, allowing applicators to treat trees quickly. There is no need to wait for absorption (translocation). Chemical is injected into the cambial area (the active vascular system) of the tree. Because the chemical is placed right where the tree can use it, effectiveness of the chemical is increased. Use in sunny or overcast conditions, rainy or dry, at any time of day. As no drilling or implants are required, you can treat trees year after year, with no threat of long-term or permanent damage to the tree. This system minimizes wounding and promotes long-term tree health and vigor.

Indications and Treatment Timing

Shepherd Fungicide is a systemic fungicide for use as an injection for prevention and treatment of:

(1) Oak Wilt (*Ceratocystis fagacearum*) of Oaks (*Quercus* spp.)
(2) Dutch Elm Disease (*Ophiostroma ulmi*) of Elms (*Ulmus* spp.)
(3) Plane Anthracnose (*Apiognomonia* veneta) of Sycamores (*Platanus spp.*)
(4) Leaf Diseases (*Gymnosporangium juniperi-virginianae*, *Pucciniastrum goeppertianum* and *Venturia inaequalis*, etc.) in non-bearing ornamental Crabapple

Oak Wilt and Dutch Elm Disease

Use Shepherd Fungicide **only** as a preventative for Oak Wilt and Dutch Elm Disease. These fungi infect the vascular system and cause plugging throughout the tree; treatment of infected trees is rarely successful.

Symptomless trees immediately adjacent to a diseased tree should be considered infected and may not respond to treatment. Symptomless trees separated by a primary plow line from diseased trees may be uninfected and can be treated. Do not use on trees weakened by extreme environmental conditions such as heat, drought, flooding, etc. It is recommended that Shepherd Fungicide be administered by applicators trained in injection techniques and in the identification of Oak Wilt and Dutch Elm Disease.

In the upper Midwest, treat oaks after June 15. Wounds in oaks in the upper Midwest between May 15 and June 15 attract insects that transmit the oak wilt pathogen. Applications to oaks in other areas and to elms may be made at any time during the growing season, spring through fall, provided the bark is pliable enough to accept the chemical injections. One application provides season-long protection. Reevaluate disease conditions annually, particularly in high disease-risk areas or for high-value trees – retreatment can be made 12-months after initial treatment and annually thereafter. Inject Shepherd Fungicide into the flare, or base of the tree, to ensure even distribution throughout the vascular system.

Note:

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.).

Anthracnose and Leaf Diseases

For these diseases, preventative applications of Shepherd Fungicide are most effective when applied in the late summer, around one month prior to the typical first frost. This allows the chemical to translocate into the bud before leaf drop. Next spring when the tree leafs out, the chemical will be in place to protect the leaf. Annual treatments are required for prevention.

Note: Before using on trees or diseases which are not listed, test on a small scale basis. Apply the recommended rate for a particular type of disease and evaluate for phytotoxicity and disease control prior to widespread use.

Treatments	Dosage per Injection Site*
Oak Wilt Disease for an uninfected Live Oak (not including Red Oak)	3-5 ml
Dutch Elm Disease for an uninfected Elm or Oak (Other than Live Oak)	5-10 ml
Anthracnose in Sycamore	2 ml
Leaf diseases in non-bearing ornamental Crabapple	1-2 ml

*The number of injection sites is based on 1 injection for every 3" to 5" of trunk circumference.

Note: Because some treatments require large amounts of chemical per site, there may be occasions where it is difficult to keep all of the chemical dose in the injection site. If this is experienced, two options are possible:

1) Reduce dosage volume by half and double the number of injection sites, or
2) Inject half the dose at each site, mark the tree, continue treating other trees, then return to the marked tree and inject remaining dosage in each site.

How to Use the ArborSystems Direct-Inject Chemicals with ArborSystems Direct-Inject Tree Injection System

1. Use only ArborSystems' Direct-Inject chemicals with your unit as they have been formulated specifically for the Direct-Inject system.
2. Attach the chemical pack to the Direct-Inject unit and prepare the unit to make injections.
3. Set the delivery volume on the unit.
4. Follow the label directions in this booklet to determine the amount of chemical and number of injection sites.
5. Determine where to make injections in the bark. Generally, the injection tip is inserted into the fissure (valley) of the tree bark. Inject thin-barked trees in the thicker part of the tree bark. Thick-barked trees require a longer injection tip.
6. Make injections working around the circumference of the tree. Make Wedgle® Tip injections within 6"to 12" of the ground. Use the Portle Tip® for injecting Sycamores or thick-barked hardwoods such as elms at the base or flare of the tree.
7. With a smooth motion, firmly squeeze the injection unit handles. This releases a pre-measured chemical dose to the tree.
8. Continue making injections moving around the tree until the entire tree trunk has been treated.
9. During use, periodically clean the Direct-Inject unit to prevent clogging.

Storage and Disposal

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

Pesticide Storage: Store in original container in a cool, dry place. **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:** Non-refillable container; do not reuse or refill this container. Completely empty pack into application equipment, then offer for recycling, if available, or dispose of empty pack in a sanitary landfill or by incineration.

{Per PR Notice 2007-4 Batch Code/Lot Number will appear either on the label or the container.}

Notice of Warranty

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

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{Box Label}

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WARNING

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DIRECTIONS FOR USE

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

The ArborSystems Direct-Inject units are designed to be used only with ArborSystems' pre-packed chemicals. Tampering with packs or contents may cause non-warrantied damage to your injection system.

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[ ] Denotes alternate/optional language
{ } Denotes language that does not appear on market labeling

{Additional Selling/Marketing Copy for use in conjunction with promotional pieces: brochures; on the website; and in other promotional materials, displays, etc.}

ArborSystems™ Direct-Inject™ System

The ArborSystems Direct-Inject Tree Injection system is effective. Chemicals are injected directly into the tree. Because the chemical is placed right where the tree can use it, effectiveness of the chemical is increased and control of most problems is reached in as little as three to five days. Also, because no chemical is lost in non-active wood, the Direct-Inject system allows you to use less chemical to achieve high levels of effectiveness; this saves money and reduces chemical waste. The Direct-Inject System injects chemicals into a tree with minimal wounding. With no holes to drill, no air or pathogens are allowed to enter the tree, potential decay never starts and long term wounding is prevented. The tree's ability to move water and nutrients, and to store food, is not compromised.

Pre-mixed chemicals are supplied in self-sealing containers. After injections have been made, you have only one small container of which to dispose. And with a closed system there is no mixing.

With no drilling required the ArborSystems Direct-Inject System:

- Minimizes wounding to keep out fungi, bacteria, and insects.
- Prevents air from getting into the tree. When air is allowed into a tree's vascular system, it cuts off the flow of water and nutrients.
- Allows multiple or annual treatments without damaging the tree.
- Requires no drills, power supply or other bulky equipment.

With this system and chemicals, tree care professionals effectively combat and manage many of the most devastating environmental plant threats.

The ArborSystems Direct-Inject System is designed to preserve and protect the natural and urban forest. Treat almost any tree in five minutes or less. The Direct-Inject System is among the most efficient chemical delivery systems available. You achieve control with less chemical because chemical is placed precisely where the tree can best use it. No chemical is lost in dead wood.

ArborSystems Direct-Inject chemicals are integral parts of the Direct-Inject Tree Injection System. Use only ArborSystems' Direct-Inject chemicals with the Direct-Inject units.

SHEPHERD™ Fungicide
Chemical: Propiconazole

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