U.S. ENVIRONMENTAL PROTECTION AGENCY Office of Pesticide Programs Registration Division (7504P) 1200 Pennsylvania Ave., N.W. Washington, D.C. 20460	EPA Reg. Number: **69117-3**	Date of Issuance: **SEP 30 2014**
NOTICE OF PESTICIDE: XX Registration XX Reregistration (under FIFRA, as amended)	Terms of Issuance: **Unconditional**	
	Name of Pesticide Product: **Shepherd Fungicide**	

Registrant:	**Mailed to Agent:**
Arbor Systems Inc. P.O. Box 34645 Omaha, NE 68134	Kim Davis RegWest Company, LLC 8203 West 20th St., Suite A Greeley, CO 80634-4696

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act. Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

EPA received a label amendment request submitted on 9/28/13. EPA grants this request under the authority of section 3(c)(5) of the Federal Insecticide, Fungicide and Rodenticide Act, as amended. With this accepted labeling, all requirements set forth in the Reregistration Eligibility Decision for **Propiconazole** have been satisfied. Therefore, EPA reregisters the product listed above. This action is taken under the authority of section 4(g)(2)(c) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product.

Submit one (1) copy of final printed labeling. Amended labeling will supersede all previously accepted labels. A copy of your label stamped "Accepted" is enclosed for your records. Products shipped after 12 months from the date of this Notice or the next printing of your label, whichever occurs first, must bear the new revised label.

If you have any questions or comments regarding this letter, please contact Shaunta Hill at (703) 347-8961 or via e-mail at hill.shaunta@epa.gov.

Continued:

Signature of Approving Official:	Date:
Shaja B. Joyner Shaja B. Joyner, Product Manager 20 Fungicides Branch-Registration Division (7505P)	9/30/2014

2711

Re-registration Notice
EPA Reg. Number: 69117-3

Enclosure:
Label stamped "Accepted"
Acute Toxicity Review dated: 10/28/2013
Product Chemistry Review dated: 9/5/2013

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Shaja B. Joyner
Product Manager 20
Fungicides Branch
Registration Division (7505P)

3-3-11

SHEPHERD® Fungicide

{Affixed Booklet – Front Panel}

SHEPHERD® Fungicide
An ArborSystems™ Wedgle® 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
CAUTION
See inside for First Aid, additional Precautionary Statements and complete Directions for Use.

{Affixed Booklet – Inside Pages}

SHEPHERD® Fungicide
An ArborSystems™ Wedgle® 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 Wedgle® 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)]

ACCEPTED
09/30/2014
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under
EPA Reg. No. 69117-3

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

First Aid

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 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 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.
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.
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-222-1222 for emergency medical treatment advice.	
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

CAUTION: 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.

All 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

In addition, all handlers (mixers, loaders and applicators or individuals performing one or more of these tasks), who are applying this pesticide using hand-held equipment must wear:

- Long-sleeved shirt and long pants,
- Shoes and socks and
- Chemical-resistant gloves.

User Safety Requirements

Users should:

- 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

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

Environmental Hazards

This product is toxic to fish and shrimp. 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 cleaning equipment or disposing of equipment washwater or rinsate.

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.

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.

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

Restrictions

Do not Inject Food-Bearing Plants

Product Information

ArborSystems™ Wedgle® Direct-Inject™ Tree Injection System

The ArborSystems™ Wedgle® 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

Table 1. Overview of Diseases and Treatments
See Table 2 and Table 3 for additional information

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

Treatments Make 1 injection for every 3" to 5" of trunk circumference	**Dosage per injection site** Higher dosages generally provide longer control	**Treatment timing**
Conifer Blights (See additional notes below)		

Diplodia Tip Blight and other Conifer Blights such as Tip Blight in Pines and Junipers	2-4 ml	Use for curative or preventive treatment. Treatments can be made any time during the growing season including in the fall **providing protection for up to two years.**	
Wilt Diseases (See additional notes below)			
Oak Wilt Disease for an uninfected Oak (not including Red Oak)	3-5 ml	Apply only to uninfected trees. Wilt diseases can only be prevented, not cured. Applications should be made only during the growing season; spring through late summer, **providing a minimum of 12-month protection.**	
Dutch Elm Disease for an uninfected Elm	5-10 ml		
Anthracnose and Leaf Diseases in Hardwoods			
Anthracnose in Sycamore	2 ml	For these diseases, use for prevention only. Applications are most effective when applied in late summer, around one month prior to the typical first frost, to suppress/prevent leaf disease in the following year. Late summer applications allow 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. Trees with leaf disease symptoms can be treated to prevent recurrence for the following year. **Annual treatments are required for prevention.**	
Leaf diseases in Oaks, Crabapple, and non-bearing ornamentals including Cherry, Citrus, Pecan, Pyracantha and Walnut	1-2 ml		
Powdery Mildew in Ash, Dogwood, Lilac and non-bearing ornamental Crabapple and Pecan	1-2 ml		
Flower Blight of non-bearing ornamental Cherry, Peach, Plum	1-2 ml		
Rust on Douglas Fir, Hawthorn, Poplars, Shasta Fir, and non-bearing ornamental Crabapple	1-2 ml		

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, several options are possible:

1. Use the Portle or WedglePlus Injection Tips which have a check valve in the hub of each tip which keeps chemical in the tree until it is absorbed.
2. Reduce dosage volume by half and double the number of injection sites.
3. 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.

Wilt Diseases: 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.).

Conifer Blights

Diplodia Tip Blight affects a variety of pines and kills current-year shoots, major branches, and ultimately entire trees. The most conspicuous symptom of diplodia blight is brown, stunted new shoots with short, brown Needles on infected new shoots often become discolored (tan, brown) while still encased in fascicle sheaths. Presence of resin droplets and one or a few very short needles are usually the first indications that a new shoot is infected. Entire new shoots are killed rapidly by the fungus. Trees repeatedly infected have some branches killed back to the main stem. Repeated infections reduce growth, deform trees, and ultimately kill them.

Treatment will not cure already affected areas of the tree but will prevent the spread of infection. Removal of dead branches, cones and fallen debris will reduce the amount of fungal spores available to cause new infections. Wait for dry fall weather to prune to avoid spreading spores on pruning equipment. Between cuts, sanitize tools by dipping in 70% alcohol or a 10% solution of household bleach in water.

Table 2. Ornamentals – Plant Species
(Numbers in parentheses refer to diseases controlled. See Table 3.)

Wood Ornamentals		Nonbearing Fruits and Nuts (Nurseries and Landscape Plantings)
Ash (4c) Azalea (2c, 4b) Crabapple (3c, 3q, 4c, 5a) Crape Myrtle (4a) Dogwood (3h, 4c) Douglas Fir (5b) Hawthorn (5a) Juniper (1a) Lilac (4c)	Oaks (3p) Pines (1b, 1c) Poplars (5b) Pyracantha (3o) (Outdoor Uses Only) Shasta Fir (5e)	Apple (3q, 4d, 5a) Cherry (2b, 3d) Citrus (3m) Nectarine (2b) Peach (2b) Pecan (3b, 3c, 3f, 3l, 3n, 4e) Plum (2b) Walnut (3j)

Table 3. Diseases	
1. Conifer Blights a. Phomopsis juniperovora (Phomopsis Blight) b. Sirrococcus strobolinus (Tip Blight) c. Sphaeropsis sapinea (Diplodia Tip Blight) 2. Flower Blight a. Ascochyta chrysanthemi (Ray Blight) b. Monilinia spp. c. Ovulinia spp. 3. Leaf Blights/Spots a. Alternaria spp. b. Cercospora spp. (Brown Leaf Spot) c. Cladosporium spp. (Scab) d. Coccomyces hiemalis e. Colletotrichum spp. f. Cristulariella spp. (Zonate leafspot) g. Diplocarpon rosae (Blackspot) h. Discula spp. (Anthracnose) i. Fabraea maculata (syn. Entomosporium maculata) j. Gnomonia leptostyla (Anthracnose)	k. Heterosporium echinulatum l. Mycosphaerella caryigena (Downy Spot) m. Mycosphaerella fructicola (Greasy Spot) n. Septoria spp. (Leaf Scorch) o. Spilocaea pyracanthae p. Tubakia dryina q. Venturia inaequalis (Scab) 4. Powdery Mildew a. Erysiphe spp. b. Microsphaera spp. c. Oidium spp. d. Podosphaera spp. e. Sphaerotheca pannosa 5. Rust a. Gymnosporangium juniperi-viginianae b. Melampsora occidentalis c. Phragmidium spp. d. Puccinia spp. e. Pucciniastrum goeppertianum f. Uromyces dianthi

How to Use the ArborSystems Direct-Inject Chemicals with ArborSystems Wedgle® 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" off 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 Wedgle® 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 Handling:** 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.

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

{Box Label}

SHEPHERD® Fungicide
An ArborSystems™ Wedgle® Direct-Inject™ Chemical

For Systemic Fungicide Suppression of Selected Diseases in Ornamental Trees

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

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.]

Keep Out of Reach of Children

CAUTION

See booklet for First Aid, additional Precautionary Statements and complete Directions for Use.

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

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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™ Wedgle® Direct-Inject™ Tree Injection System

The ArborSystems Wedgle 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 Wedgle Direct-Inject system allows you to use less chemical to achieve high levels of effectiveness; this saves money and reduces chemical waste. The Wedgle 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 Wedgle ArborSystems Direct-Inject System:

- Minimizes wounding to keep out diseases, 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 Wedgle Direct-Inject System is designed to preserve and protect the natural and urban forest. Treat almost any tree in five minutes or less. The Wedgle 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 Wedgle Direct-Inject chemicals are integral parts of the Wedgle Direct-Inject Tree Injection System. Use only ArborSystems Wedgle Direct-Inject chemicals with the Wedgle Direct-Inject units.

Chemical Selection
Your distributor can advise you on the best chemical selections for trees in your area.

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