Department of Agriculture
STATE OF HAWAII

LICENSED

PERIOD 2014-2016 LIC. NO.

9226.174

Department of Agriculture
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LICENSED

PERIOD 2011-2013 LIC. NO.

Alamo®
Fungicide

A flare root-injected systemic fungicide for control of selected diseases in trees

Active Ingredient:

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

Alamo contains a nominal 1.3 pounds of active ingredient per gallon.

KEEP OUT OF REACH OF CHILDREN.

WARNING/AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-741 *EPA Est. 39578-TX-1*

SCP 741A-L4H 0911
359931

1 quart Net Contents

syngenta®

SCP 130-741A-L4H

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. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately 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.
NOTE TO PHYSICIAN If ingested, induce emesis or lavage stomach. Treat symptomatically.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
HOT LINE NUMBER For 24-Hour Medical Emergency Assistance (Human or Animal) or Chemical Emergency Assistance (Spill, Leak, Fire, or Accident), Call **1-800-888-8372**	

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

WARNING/AVISO

Causes substantial, but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Avoid breathing vapor or spray mist. Wear goggles or face shield. Wear rubber gloves and a long-sleeved shirt when mixing, handling, and applying the product. 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.

Environmental Hazards

This pesticide 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 washwater or rinsate.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product must be followed carefully. It is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. To the extent consistent with applicable law, Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. To the extent consistent with applicable law: (1) this warranty does not extend to the use of the product contrary to label instructions or under conditions not reasonably foreseeable to or beyond the control of Seller or SYNGENTA, and, (2) Buyer and User assume the risk of any such use. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS WARRANTED BY THIS LABEL.

To the extent consistent with applicable law, in no event shall SYNGENTA be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

DIRECTIONS FOR USE

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

FAILURE TO FOLLOW THE DIRECTIONS FOR USE AND PRECAUTIONS ON THIS LABEL MAY RESULT IN PLANT INJURY OR POOR DISEASE CONTROL.

PRODUCT INFORMATION

Alamo is a systemic fungicide for use as a flare root 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) sycamore anthracnose (*Apiognomonia veneta*), and (4) leaf diseases (i.e., *Venturia inaequalis, Gymnosporangium juniperi-virginianae, Pucciniastrum goeppertianum,* etc.) of crabapple (*Malus* spp.), and (5) laurel wilt: redbay and other lauraceae species (excluding avocado). It is recommended that Alamo be administered by trained arborists or others trained in injection techniques and in the identification of tree diseases.

Notes: The active ingredient in Alamo has been shown to be safe on a wide range of plant species. Before using Alamo on plants or for diseases that are not listed in the **Directions for Use**, test Alamo on a small scale basis and evaluate for phytotoxicity and disease control prior to widespread use.

Correct Location for Injector Placement

The flare root area is the transitional zone between the trunk and the root system. Uptake and distribution of Alamo is more effective when injections are made into the flare roots. In addition, wounds created in the flare root area close more rapidly in comparison to wounds above the flare root area.

Tree Preparation

1. Heavy, thick, or loose outer bark may be carefully shaved to form a smoother injection point and to ensure the operator that the drill hole penetrates through the bark to the xylem.
2. If the flare roots are not clearly exposed, carefully remove 2 to 4 inches of soil from the base of the tree to uncover the top of the flare roots. Brush away loose soil.
3. Drill holes through the bark, into sapwood using a clean sharp drill bit. Drill hole diameter should be adequate to allow insertion of injection tees and formation of air tight contact between active xylem and the delivery point of the injection tees. Generally, a drill hole diameter of 7/32-5/16 inch for elms, sycamores, and crabapples, and 5/16 inch for oaks is appropriate. Follow manufacturer's instructions for the particular injection device used in the treatment.

   Drill hole depth should be adequate to deliver the product into active xylem tissue. Generally, 3/4 inch depth is appropriate, but trees with thick bark may require increased drill hole depth to reach the active xylem layer.

   Space injectors 3-6 inches apart around the base of the tree. Do not drill in the valleys between the flare roots or into cankered areas. Drill above these areas into the trunk, then continue again into sound sapwood on the flares.
4. Disinfect the drill bit between trees with household bleach (20% solution), ethanol, or other disinfectant. Rinse bit with clean water after disinfecting.
5. Insert into the drilled holes the injection ports ("tees") which are connected to plastic tubing. The tubing should have inlet and outlet valves.
6. Mix the specified amount of Alamo and water thoroughly in the tank before beginning the injection treatment.

Tree Measurement

Measure the diameter of the tree using a tree diameter-tape (D-tape) at 4 1/2 feet above the ground. This is the diameter at breast height (DBH). If only a regular tape is available, measure the tree circumference and divide that number by 3.14.

For crabapples, measure the diameter at the point where the tree begins to branch.

Preparation of Injection Solution

Dilute 10 ml of Alamo in up to 1 liter of water per inch DBH.

Refer to the following table as an example of the amounts of Alamo and water to use:

DBH inches	Treatment Level (ml)	Water Volume* (liters)
5	50	5
10	100	10
15	150	15
20	200	20
25	250	25
30	300	30
35	350	35
40	400	40

*Use up to the amount indicated.

Injection

For pressurized injections, with the outlet valve open, connect the tank to the inlet valve and begin pumping solution until all air bubbles come out of the outlet valve. Direct the solution into a container and return the solution to the tank. Shut off the outlet valve. Pressurize tank to 20-30 psi. Check for leaks and gently tap in tees if necessary. Maintain continuous pressure on the injection system until the full amount of solution is in the tree.

After injection is complete, remove injection tees and leave drill holes unplugged. A water flush to cleanse the hole will assist with wound closure. Soil should be replaced around the tree. It is not necessary to treat the drill holes with wound paint or other sealing compounds.

Contact your local extension agent for more details on tree injection. The injection system described is meant as an example; please refer to manufacturer's instructions when using other types of tree injection systems.

Retreatment

At the initial injection of Alamo, take notes on the level of disease in each tree. Reevaluate disease level in trees at 12-month intervals after treatment for the potential need for retreatment with Alamo. Preventive applications should be considered 12-36 months after the initial injection. Trees in high disease risk areas or high value trees should be evaluated for possible retreatment 12 months after each treatment.

Follow application procedures described above for repeat injections; new drill holes will be needed for subsequent treatments.

OAK WILT: OAKS

Preventive and Therapeutic Treatment

Use 10 ml of Alamo in up to 1 liter of water per inch DBH. For very high disease pressure, 20 ml of Alamo per inch DBH may be used.

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.

Oak trees exhibiting less than 20% crown loss from oak wilt have the best chance of responding to treatment by Alamo. Preventive application is more effective than therapeutic treatment. Trees in advanced stages of disease development may not respond to treatment.

Uninfected trees will generally absorb the full amount of Alamo: water solution within 2 hours when injected under pressure. Trees exhibiting specific symptoms or those 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. Infected trees will absorb the material more slowly due to the vascular plugging caused by the disease. If the Alamo:water solution is not absorbed within 24 hours, the tree is considered high risk and has a poor chance of survival.

See the **Product Information** section for details on retreatment.

LEAF DISEASES: CRABAPPLES

Preventive Treatment

Use 10 ml of Alamo in up to 1 liter of water per inch trunk diameter. For trees less than 10 inches trunk diameter, use 6 ml of Alamo per inch trunk diameter. Make applications when the trees are in full leaf and actively growing for control of the next season's leaf disease development. Disease symptoms may not be reduced the year of application.

See the **Product Information** section for details on retreatment.

Note: Do not use fruit from treated trees for food or feed purposes.

ANTHRACNOSE: SYCAMORE

Preventive Treatment

Use 10 ml of Alamo in up to 1 liter of water per inch DBH. For trees less than 10 inches DBH, use 6 ml of Alamo per inch DBH. Make applications when the trees are in full leaf and actively growing for control of the next season's anthracnose development.

See the **Product Information** section for details on retreatment.

DUTCH ELM DISEASE IN ELMS

Preventive and Therapeutic Treatment

Use 6-10 ml of Alamo in up to 1 liter of water per inch DBH. For very high disease pressure, 20 ml of Alamo per inch DBH may be used.

Notes: (1) Accurate diagnosis of Dutch elm disease is important since Alamo only provides control of Dutch elm disease in elms. (2) Alamo will be most effective when used in conjunction with other cultural practices recommended for management of Dutch elm disease (removal of dead elm trees, pruning of diseased tree limbs and branches, control of bark beetles, etc.). (3) Preventive applications can be made at 6-10 ml/inch DBH. The 6 ml rate should provide 24 months control and the 10 ml rate should provide 36 months control. (4) Therapeutic treatment in trees showing disease symptoms should be made at 10-20 ml/inch DBH. Retreatment may be needed every 12-36 months. Trees in advanced stages of disease development may not respond to treatment.

For further information on the proper diagnosis and control of Dutch elm disease, consult your local extension agent. See the **Product Information** section for details on retreatment.

LAUREL WILT: REDBAY AND OTHER LAURACEAE SPECIES (EXCLUDING AVOCADO)

Do not apply Alamo to any plant in the Lauraceae family that produces fruit or other plant parts that may be used for human or animal consumption.

Do not apply Alamo to bearing or non-bearing Avocados.

Preventive Treatment

Use 20 ml of Alamo in up to 0.3 liter of water per inch DBH. Make applications to healthy trees when the trees are in full leaf and actively growing and prior to disease symptoms. Alamo will be most effective when used in conjunction with control of ambrosia beetle, the laurel wilt insect vector.

See the **Product Information** section for details on retreatment.

STORAGE AND DISPOSAL

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

Pesticide Storage

Store in a cool, dry place. Store in the original container.

Pesticide Disposal

Pesticide wastes are toxic. Improper disposal of unused pesticide, injection mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your local State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities by burning. If burned, stay out of smoke.

For minor spills, leaks, etc., follow all precautions listed on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedures and disposal of wastes.

CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER.

Alamo®

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Product of Switzerland
Formulated in the USA

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For non-emergency (e.g., current product information) call
Syngenta Crop Protection at 1-800-334-9481.

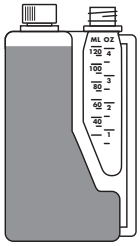
Manufactured for:
Syngenta Crop Protection, LLC
P.O. Box 18300
Greensboro, North Carolina 27419-8300

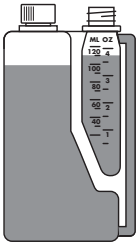
SCP 741A-L4H 0911

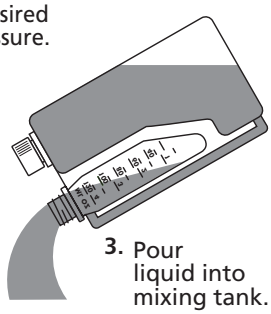
MULTI-USE CONTAINER

1. Remove the measuring chamber cap.

2. Squeeze container so liquid rises up the tube and fills the chamber to desired mark. Release pressure.







3. Pour liquid into mixing tank.