Brandt® enTREE® Tebu RTU

Systemic Fungicide

Systemic fungicide in ready to use devices for tree injection use for seasonal suppression of certain diseases of ornamentals

ACTIVE INGREDIENT:
Tebuconazole (1.09 g/mL) a-[2-(4-Chlorophenyl)ethyl] -a-(1,1-dimethylethyl)-1H- 1,2,4-triazole-1-ethanol 16.0%
OTHER INGREDIENTS:..... 84.0%
TOTAL 100.0%

EPA Reg. No. 7946-28-48813 EPA Est. No. 48813-IL-1

See complete First Aid, Precautionary Statements, and Directions For Use inside booklet.

NET CONTENTS:

☐ 12 RTU devices @ 15 mL (0.51 fl. oz.) each; 60 mL (6.09 fl. oz. net plus 12 injectors

☐ 24 RTU devices @ 15 mL (0.51 fl. oz.) each; 240 mL (12.18 fl. oz. net plus 24 injectors

☐ 50 RTU devices @ 15 mL (0.51 fl. oz.) each; 500 mL (25.36 fl. oz. net plus 50 injectors

BRANDT®

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09051BRN
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KEEP OUT OF REACH OF CHILDREN

CAUTION

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.)

FIRST AID

IF ON SKIN: 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 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. 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 by a poison control center or doctor. Do not give anything to an unconscious person.

HOT LINE NUMBER: 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.

NOTE TO PHYSICIAN: There is no specific antidote available. Treat patient symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Causes moderate eye irritation. Wear protective eyewear such as goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical resistant to this product are listed below. Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves, polyethylene or butyl rubber or neoprene rubber or Viton
- Shoes plus socks
- Protective eyewear

Follow the 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.
- 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.

ENVIRONMENTAL HAZARDS

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 contaminate water when disposing of equipment washwaters 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.

Read entire label, use strictly in accordance with precautionary statements and directions, and with applicable state and federal regulations. Failure to follow label directions may result in poor control or tree injury.

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.

USE SITES

BRANDT enTREE TEBU RTU fungicide is for use on ornamental trees for the control of the following pathogens: (1) Oak wilt (Ceratocystis fagacearum) of oak (**not for use in California**); (2) Dutch elm disease (Ceratocystis ulmi) of elms (**not for use in California**); (3) Crabapple scab (Venturia inaequalis) of ornamental crabapple; and (4) Hawthorn leaf spot (Diplocarpon theumenii) of hawthorn; (5) Anthracnose. For best results, use as a preventative treatment.

FACTORS AFFECTING APPLICATON:

Applications are most effective when made prior to insect infestation and in conjunction with good cultural management practices. The species and health of the tree, as well as local environmental conditions, will determine the rate of uptake when using the BRANDT enTREE Ready-To-Use (RTU) Micro Tree Injection Devices. Uptake time in the tree usually occurs within several minutes to over an hour, but trees in advanced stages of insect infestation may not respond to treatment. If BRANDT enTREE TEBU RTU is not absorbed within 24 hours, (barring any applicator error or malfunction of injection device or environmental factors affecting tree transpiration) the tree may be considered high risk with a possible poor chance of survival.

STATE OF HAWAII
Department of Agriculture
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Environmental Conditions

This technology relies on the natural uptake rate of the tree; and thus, factors that affect the transpiration rate can greatly affect the uptake rate. Transpiration is dependent upon a number of factors, such as soil moisture, soil and air temperatures, and time of day. For optimum uptake, apply when soil moisture is adequate and soil temperatures are above 45°F. Preferred conditions for injections are morning to early afternoon hours, with warm temperatures (55-85°F / 13-30°C), accompanied by low humidity, clear skies and a slight breeze. Sunny conditions along with moist soil and a well-hydrated tree will also increase the transpiration rate and will therefore improve uptake. Conversely, cool temperatures, cloudy and/or evening skies and trees under moisture stress will slow down the rate of uptake. Extreme heat and cold temperatures will adversely affect rates as well.

Trees that have healthy vascular systems will have correspondingly higher uptake rates. Trees in advanced stages of pest development may not respond to treatment, as vascular plugging caused by disease inhibits transpiration. If BRANDT enTREE TEBU RTU has not started to absorb within two hours, consider removing the device (following the proper sequence provided in the removal instructions) and; drill a new hole in a different area of the trunk and inject again. The injection devices need to be evenly spaced at points on the trunk free of visible decay areas and wounds from the point of injection to where branching begins. If BRANDT enTREE TEBU RTU has not started to absorb within one hour after the second attempt, the vascular system of the tree may be too compromised for treatment or there is significant decay in that local injection area.

Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequently poor control. Avoid treating trees that are moisture stressed or suffering from herbicide damage.

Monitor Tree Health and Disease Infestations

Preventative application is more effective than therapeutic treatment in trees showing disease symptoms. Effective injection treatment is favored by a full canopy (i.e., leaves) and a healthy vascular system. Once these tissues are compromised by pest damage (larval galleries, defoliation, leaf mining, etc.), an effective and uniform application of BRANDT enTREE TEBU RTU may be difficult to achieve and subsequent control may be poor. For optimal results, treat at least 2 to 4 weeks before pests historically infest the host tree. and/or evening skies and trees under moisture stress will slow down the rate of uptake. Extreme heat and cold temperatures will adversely affect rates as well.

APPLICATION INSTRUCTIONS:

Restrictions

- **DO NOT** inject trees that are drought stressed.
- **DO NOT** inject newly established trees and/or trees that are less than 5 inches DBH or 15 inches in circumference.
- **DO NOT** exceed calculated number of BRANDT enTREE RTU Micro Tree Injection Devices per tree.
- **DO NOT** use on trees which will produce food within the year following treatment unless food crop on treated tree is discarded and destroyed.

Timing of Application:

Perform applications when disease symptoms first appear on the tree. For best results, use as a preventative treatment for the disease. Focus timing and treatment on the most susceptible stage of the target pathogen.

Retreatment:

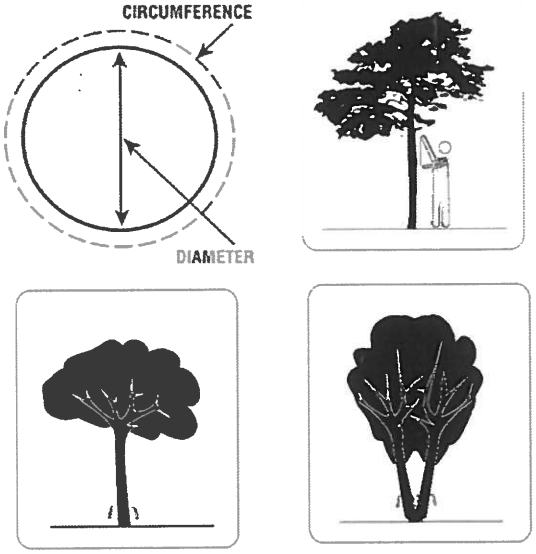
At time of initial application, make note of the health level of each tree. Reevaluate health level in treated trees at 12-month intervals to determine the need for retreatment. Consider preventive applications 12-36 months after the initial treatment. Evaluate trees in high pest pressure areas or highly valued trees for retreatment if symptoms progress or 12 months after each treatment. Follow application procedures described above for repeat injections; new drill holes will be required for subsequent treatments. Stagger the holes equally in subsequent applications to ensure proper uptake.

TARGET PATHOGENS ON ORNAMENTAL TREES
OAK WILT (CERATOCYSTIS FAGACEARUM) OF OAK (**NOT FOR USE IN CALIFORNIA**)
DUTCH ELM DISEASE (CERATOCYSTIS ULMI) OF ELMS (**NOT FOR USE IN CALIFORNIA**)
CRABAPPLE SCAB (VENTURIA INAEQUALIS) OF ORNAMENTAL CRABAPPLE
HAWTHORN LEAF SPOT (DIPLOCARPON THEUMENII) OF HAWTHORN
ANTHRACNOSE

Number of BRANDT enTREE RTU Micro Tree Injection Devices Required for Treatment

Injection dosages are based on the Diameter (inches or centimeters) of the tree at Breast Height ("DBH"). DBH is the outside bark diameter of the trunk at 4.5 feet (1.4 m) above the ground on the uphill side of the tree. For the purposes of determining breast height, the ground includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

The diameter is determined by measuring the circumference of the tree at breast height, and dividing circumference (in inches) by three (3). To determine DBH for multi-stemmed woody ornamentals, measure the DBH of each stem or branch and add together for the total DBH per tree.



Take the DBH of the tree and divide by five (5) to determine the appropriate number of BRANDT enTREE RTU Micro Tree Injection Devices to adequately treat the tree at the desired application rate. Do not treat newly established trees less than 5 inches DBH or 15 inches in circumference.

In the event the tree has multiple trunks that separate less than three (3) feet from the ground e.g., avocado, citrus, peach, etc., each individual trunk must be treated separately to ensure equally homogenous distribution of solution to all parts of the tree. In this instance, each individual trunk must be measured in the same way as if the trunk were standing individually.

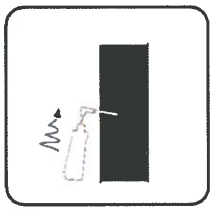
Refer to the chart below. Position the number of injection devices evenly around the trunk of the tree. For example, in the case of a 10" diameter tree where 2 injection devices are used, place each injection device in directly opposing positions on the trunk to allow for even distribution. **DO NOT** exceed calculated number of BRANDT enTREE RTU Micro Tree Injection Devices per tree.

Tree Diameter (DBH) (inches)	Circumference (Inches)	Number of RTU Injection Devices	Application Rate (mL Product; grams Active Ingredient)
5 to 7	15 to 21	1	15 mL/16.3 g
8 to 10	24 to 30	1-2	15-30 mL/16.3-32.7 g
11 to 13	33 to 39	2	30 mL/32.7 g
14 to 16	42 to 48	2-3	30-45 mL/32.7-49.0 g
17 to 19	51 to 57	3	45 mL/49.0 g
20 to 22	60 to 66	4	60 mL/65.4 g
23 to 28	69 to 84	4-5	60-75 mL/65.4-81.7 g
29 to 31	87 to 93	5-6	75-90 mL/81.7-98.1 g
32 to 34	96 to 102	6	90 mL/98.1 g
35 to 37	105 to 111	7	105 mL/114.4 g
38 to 40	114 to 120	7-8	105-120 mL/114.4-130.8 g
41 to 43	123 to 129	8	120 mL/130.8 g

44 to 46	132 to 138	8-9	120-135 mL/130.8-147.1 g
47 to 49	141 to 147	9	135 mL/147.1 g
50 to 52	150 to 156	10	150 mL/163.5 g
53 to 58	159 to 174	10-11	150-165 mL/163.5-179.8 g
59 to 61	177 to 183	11-12	165-180 mL/179.8-196.2 g
62 to 64	186 to 192	12	180 mL/196.2 g
65 to 67	195 to 201	13	195 mL/212.5 g
68 to 70	204 to 210	13-14	195-210 mL/212.5-228.9 g
71 to 73	213 to 219	14	210 mL/228.9 g

Preparing the Holes

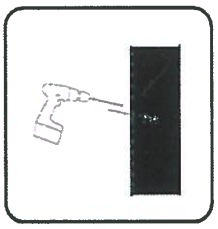
To ensure an equal and homogenous delivery of active ingredient to all parts of the tree's branching structure, space the required number of holes evenly around the circumference of the tree. Hole placement can range from lowest point at the root flare to highest point at breast height (approximately 4.5 ft [1.4 m] above the ground). Injection holes must be at least 20 inches (51 cm) below the lowest branch on the trunk. The preferred method is to inject at the base of the tree, within 12 inches (310 cm) of the soil. Prepare injection sites in healthy wood free from any defects such as old wounds or decayed areas. Avoid placement of devices in between the root flares where there is tight compression of the bark and cambium tissue.



Using an electric drill, select a ¼ inch (0.635 cm) fast spiral drill bit (for optimal performance, use a high-helix drill bit). It is necessary to drill holes into the tree deep enough to reach the tree's vascular system for translocation of the active ingredient throughout the tree. Make injection holes at least ½ to ¾ inch into healthy xylem (white wood) with actual depth up to 2 inches (5 cm) or more from the outer trunk surface depending upon the tree species and outer bark thickness. For conifer species with high resin pressure, drill holes higher on the trunk (36-48 inches or 91-122 cm) and to a deeper drill depth of 2+ inches (5+ cm).

For optimal device performance and to minimize leakage and improve holding capacity of the injector, be sure to (1) use clean, sharp drill bits; (2) enter horizontally at 90° OR slightly angle depth of hole downwards; and (3) make one clean drill entrance into the tree (i.e., avoid multiple in-and-out motions of drill bit in hole) to reduce residual shavings left inside the hole. Follow good application practices by disinfecting drill bits prior to use on each tree to minimize the spread of disease where known infections occur.

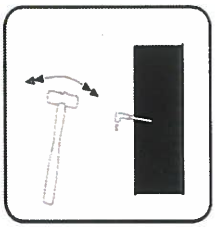
Inserting the Connector



Once the injection site is drilled, insert the longer and thicker part of the connector into the tree hole and secure its placement by pushing and twisting of hand OR by gently tapping the connector with a nylon hammer or rubber mallet. The connector shall only be inserted to the point where it fits snugly in the hole. DO NOT force the connector too deeply into the hole.

Be sure to leave approximately ½ inch (1.3 cm) of open chamber at the end of connector to allow the solution to collect and be pulled through the vascular system of the tree.

Connecting the BRANDT enTREE TEBU RTU Micro Tree Injection Device

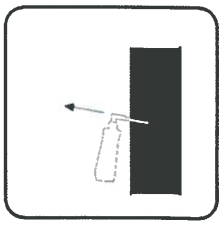


Remove the colored cap and connect the injection device to the connector by firmly pushing the connector through the membrane of the injection device top. To ensure the injection device is securely inserted, slightly twist and gently force the injection device in an upward motion on to the connector until it snaps snugly into final position.

The injection device can be placed upright, sideways, or upside-down on the connector, depending upon placement of the connector on the tree.

Resinous Conifers: In resinous conifers, such as pine and spruce, start the injection immediately after drilling into the sapwood. A prolonged delay may reduce uptake due to resin flow into the opening.

Removing the BRANDT enTREE TEBU RTU Micro Tree Injection Device



When the injection device is empty, first remove the injection device from its connector. Any residual solution remaining in the connector will be quickly absorbed by the tree. Then remove the connector from the tree. Note: The injection device membrane will re-seal itself to avoid any leakage or spillage until it is re-penetrated with the connector.

It is not necessary to treat the drill holes with wound paint or other sealing compounds. The hole will seal naturally.

Trouble Shooting Tips for Injection

Problem: Solution is not taking up.

Possible Cause: Connector is put in too deeply in the injection hole preventing the solution from pooling inside tree and/or taking up.

Solution: Follow instructions for removal, and re-insert the connector and connect the device for further uptake. Be sure to leave approximately ½ inch (1.27 cm) of open chamber at the end of connector to allow the solution to collect and be pulled through the vascular system of the tree.

Problem: Solution is not taking up.

Possible Cause: Injection device is not fully inserted on the connector creating a loose connection preventing the solution from pooling inside tree and/or taking up.

Solution: To ensure the injection device is securely inserted, slightly twist and gently force the injection device in an upward motion on to the connector until it snaps snugly into final position.

Problem: Solution is leaking from drilled hole.

Possible Cause: The connector is not fully inserted into the hole in the tree. Alternatively, the connector is inserted deeply enough, but the solution is not moving through the vascular system of the tree due to a variety of issues (injury to vascular system, temperature, lack of moisture, etc.) Alternatively, the hole could be too large of a diameter.

Solution: Ensure the hole is not too large; if for some reason the hole was made too large (too large of a drill bit, faulty chuck in the drill bit, etc.) follow instructions for removal, drill a new hole with the proper size drill bit and functional drill, and insert the connector. Ensure the connector is in deep enough by providing a few light taps with a rubber mallet to move the connector slightly deeper into the hole. Finally, be sure that the time of injection is conducive for uptake. Please refer to label section regarding optimal conditions for tree uptake.

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Keep pesticide in original container. Store in a cool (45°F-90°F), dry place out of direct sunlight and out of reach of children and animals.

PESTICIDE DISPOSAL: Wastes resulting from the use of this device may be disposed of on site or at an approved waste disposal facility. Remove connector from injection device prior to disposal.

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.

NOTICE OF WARRANTY

To the extent consistent with applicable law, Brandt Consolidated Inc. makes no warranty of merchantability, fitness for any purpose or otherwise expressed or implied concerning this product or its uses which extends beyond the use of the product under normal conditions in accord with the statements made on this label

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