



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

September 25, 2019

J.J. Mauget Co.
C/O Tyler B. Murray
SciReg, Inc.
12733 Director's Loop
Woodbridge, VA 22192

Subject: Notification per PRN 98-10 – Addition of disease
Product Name: TEBUJECT 16
EPA Registration Number: 7946-28
Application Date: 08/08/2019
Decision Number: 554614

Dear Mr. Murray:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped "Notification" and will be placed in our records.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you have any questions, please contact Maryam K. Muhammad by phone at 703-347-0301, or via email at Muhammad.maryam@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to be "HJ", written over a circular scribble.

Hope Johnson, Product Manager 21
Fungicide Branch
Registration Division (7505P)
Office of Pesticide Programs



Tebuject™ 16

**SYSTEMIC FUNGICIDE
IN READY TO USE CAPSULES
FOR TREE INJECTION USE FOR SEASONAL SUPPRESSION
OF CERTAIN DISEASES OF ORNAMENTAL TREES**

MFG. BY:
TOWN, STATE:
EPA REGISTRATION NO:
EPA ESTABLISHMENT NO:

J.J. MAUGET CO.
Arcadia, CA 91006
7946-28

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%

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID	
IF ON SKIN OR CLOTHING	<ul style="list-style-type: none"> • 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	<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. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED	<ul style="list-style-type: none"> • 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.

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.

Net Contents:

- _____ 24 capsules plus 24 feeder tubes per carton
- _____ 24 capsules @ 0.14 fl. oz. (4 mL) each, 3.25 fl. oz. (96 mL) net
- _____ 24 capsules @ 0.2 fl. oz. (6 mL) each, 4.9 fl. oz. (144 mL) net
- Shipping box: 12 cartons as above.
- _____ 288 capsules @ 0.14 fl. oz. (4 mL) each, 39.0 fl. oz. (1152 mL) net
- _____ 288 capsules @ 0.2 fl. oz. (6 mL) each, 58.4 fl. oz. (1728 mL) net

**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 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.

NOTIFICATION

7946-28

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

09/25/2019

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

TEBUJECT 16™ fungicide is for use on ornamental trees in landscapes 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. Not intended for use on ornamentals for resale.

FACTORS AFFECTING APPLICATION

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 Mauget system. 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 TEBUJECT 16 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.

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 TEBUJECT 16 has not started to absorb within two hours, consider removing the capsule (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 TEBUJECT 16 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.

Monitor Tree Health and Pest 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 TEBUJECT 16 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.

APPLICATION INSTRUCTIONS

Restrictions

- **DO NOT** inject trees that are drought stressed. 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.
- **DO NOT** inject newly established trees and/or trees that are less than two inches in diameter at breast height (DBH) (6 inches in circumference).
- **DO NOT** exceed calculated number of capsules 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.
- **DO NOT** apply to trees that exceed 100 inches DBH

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.

Application Tips:

To account for trunk flare, place injection sites evenly around the base of the root flare within 6 to 8 inches of the root crown. For pines and other resinous conifer species, injection sites may be higher up on the trunk (see Step 5 below). Follow good injection practices. Disinfect drill bit prior to use on each tree.

Tree measurement guidance

Dosages are based on the circumference OR 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.

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

FUSARIUM DIEBACK

1. The MAUGET SYSTEM

- (A) Mauget compressible capsule with insert hole
- (B) Feeder tube with flanged gun-sight and opposite tapered beveled end

2. TOOLS

- (A) Portable electric drill
- (B) 11/64 in. (0.4 cm) drill bit
- (C) Plastic mallet
- (D) Tape measure
- (E) Insertion tool (optional)

3. NUMBER OF CAPSULES

Measure the tree at breast height in inches. If measuring the circumference, divide this number by six (6) to determine the number of capsules needed. If measuring the diameter, divide this number by 2 (two) to determine the number of capsules needed. If the number of capsules results in a fraction, round down to the lower whole number.

For low disease severity, use 4 mL capsules. For heavier infestation use 6 mL capsules. Trees in advanced stages of disease development, may not respond to treatment. The health, species of the tree and the environmental conditions will determine the rate of uptake.

Tree Diameter (DBH inches)	Circumference (Inches)	4 mL/DBH Rate (Number of capsules; grams of Active Ingredient)	6 mL/DBH Rate (Number of capsules; grams Active Ingredient)
2 to 4	6 to 12	1 to 2 capsules/4.4 to 8.7 g	1 to 2 capsules/6.5 to 13.1 g
5 to 7	15 to 21	2 to 3 capsules/8.7 to 13.1 g	2 to 3 capsules/13.1 to 19.6 g
8 to 10	24 to 30	4 to 5 capsules/17.4 to 21.8 g	4 to 5 capsules/26.2 to 32.7 g
11 to 13	33 to 39	5 to 6 capsules/21.8 to 26.2 g	5 to 6 capsules/32.7 to 39.2 g
14 to 16	42 to 48	7 to 8 capsules/30.5 to 34.9 g	7 to 8 capsules/45.8 to 52.3 g
17 to 19	51 to 57	8 to 9 capsules/34.9 to 39.2 g	8 to 9 capsules/52.3 to 58.9 g
20 to 22	60 to 66	10 to 11 capsules/43.6 to 48.0 g	10 to 11 capsules/65.4 to 71.9 g
23 to 25	69 to 75	11 to 12 capsules/48.0 to 52.3 g	11 to 12 capsules/71.9 to 78.5 g
26 to 28	78 to 84	13 to 14 capsules/56.7 to 61.0 g	13 to 14 capsules/85.0 to 91.6 g
29 to 31	87 to 93	14 to 15 capsules/61.0 to 65.4 g	14 to 15 capsules/91.6 to 98.1 g
32 to 34	96 to 102	16 to 17 capsules/69.8 to 74.1 g	16 to 17 capsules/104.6 to 111.2 g
35 to 37	105 to 111	17 to 18 capsules/74.1 to 78.5 g	17 to 18 capsules/111.2 to 117.7 g
38 to 40	114 to 120	19 to 20 capsules/82.8 to 87.2 g	19 to 20 capsules/124.2 to 130.8 g
41 to 43	123 to 129	20 to 21 capsules/87.2 to 91.6 g	20 to 21 capsules/130.8 to 137.3 g
44 to 46	132 to 138	21 to 23 capsules/91.6 to 100.3 g	21 to 23 capsules/137.3 to 150.4 g
47 to 49	141 to 147	23 to 24 capsules/100.3 to 104.6 g	23 to 24 capsules/150.4 to 157.0 g
50 to 52	150 to 156	25 to 26 capsules/109.0 to 113.4 g	25 to 26 capsules/163.5 to 170.0 g
53 to 55	159 to 165	26 to 27 capsules/113.4 to 117.7 g	26 to 27 capsules/170.0 to 176.6 g
56 to 58	168 to 174	28 to 29 capsules/122.1 to 126.4 g	28 to 29 capsules/183.1 to 189.7 g
59 to 61	177 to 183	29 to 30 capsules/126.4 to 130.8 g	29 to 30 capsules/189.7 to 196.2 g
62 to 64	186 to 192	31 to 32 capsules/135.2 to 139.5 g	31 to 32 capsules/202.7 to 209.3 g
65 to 67	195 to 201	32 to 33 capsules/139.5 to 143.9 g	32 to 33 capsules/209.3 to 215.8 g
68 to 70	204 to 210	34 to 35 capsules/148.2 to 152.6 g	34 to 35 capsules/222.4 to 228.9 g
71 to 73	213 to 219	35 to 36 capsules/152.6 to 157.0 g	35 to 36 capsules/228.9 to 235.4 g

4. PRESSURIZING THE CAPSULES

Apply the appropriate amount of pressure on the top of the capsule in order to compress.

5. DRILLING THE TREE HOLE

Predrill spaced injection sites at a slight downward angle at the root flair/buttress area (approximately 6.0 to 8.0 in., 15 to 20 cm) above ground level, using a clean 11/64 in. (0.4 cm) drill bit (except monocotyledons, conifers, etc.). Drill the hole deep enough to allow the vascular system to transport TEBUJECT 16 throughout the tree. Make injection holes at least 3/8 to 1/2 inch (0.95 to 1.3 cm) into healthy xylem (white wood) under the bark, up to a depth of 2 inches (5 cm) from the outer trunk surface depending upon the tree species and outer bark thickness. For conifer species with high resin pressure during the growing season, place injection sites higher on the trunk (36 – 48 inches) and to a depth of up to 2 inches where tree diameter allows. Disinfect drill bit and insertion tool (if used) prior to use on each tree.

6. TREE HOLE DEPTH

It is important that the feeder tube be set to the proper depth in the conductive xylem tissue. If set too deeply, flow is restricted by blockage in the heartwood; if set too shallow, leakage may occur. The feeder tube dispensing end is beveled to allow for a 1/4 in. plus tolerance.

7. COMBINING CAPSULE AND FEEDER TUBE

Several methods of combining the capsule with the feeder tube are acceptable including placing by hand, the feeder tube's flange end, with the flange notch upward, into the capsule insert hole of a compressed upright capsule. Push the flange end of the feeder tube flush with the membrane located at the inner end of the insert hole.

8. PLACING THE FEEDER TUBE IN THE TREE

Firmly seat the beveled, dispensing end of the feeder tube, with the attached upright capsule, into the predrilled tree injection hole. Tap the rear side, opposite the insert hole of the capsule with a mallet. This action will simultaneously seat the feeder tube in the injection hole while breaking the capsule membrane for releasing the capsule contents into the feeder tube and into the tree. Another method is to place the feeder tube in the predrilled hole of the tree using the optional insertion tool. Then place the compressed capsule onto the feeder tube in place.

9. REMOVAL

Uptake in the tree usually occurs within several minutes. Capsules may be temporarily rotated in place to see if any liquid is left. When empty, turn the capsules upside down for one minute before removal. Applicators must remove capsules promptly after treatment. Empty capsules must not be left on the tree. The health and species of the tree, and local environmental conditions will determine the rate of uptake. If the capsule does not completely empty within a few hours, invert and carefully remove the capsule and enclose it in a heavy duty plastic bag for disposal in accordance with state and local regulations.

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 product may be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available, or dispose of empty capsules 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, J.J. Mauget Co. 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.

List of optional label claims:

- Begins absorbing upon injection
- Connect directly to the tree
- Convenient (Simple) (Design)
- Easy(-ier) to use (convenient, handy, useful, well-situated)
- Easy to apply
- Easy to store
- Easy (to use)
- Easy to use application
- Economical
- Even if it rains - it won't lose its effectiveness
- Ideal for targeting specific infested locations (in orchards)
- It works!
- Long Lasting Protection
- Long lasting treatment
- No mix, no mess
- No mixing (necessary) (required)
- Once it enters the tree it won't wash off
- Only takes a few minutes to inject
- Outdoor use only
- Preventative treatment
- Provides maximum control
- Ready to Use
- Shake well before application (applying)
- Ready to Use applicator (device)
- Quick and easy to use
- Ready to Use – No Mixing, No Measuring
- Requires no mixing
- Results that show
- Easier, more economical! Simple (and easy) (to use)
- Systemic treatment of undesirable pests (and disease)
- (The) Next Generation of Tree Care (tree injection)
- The key ingredient in this product (Tebuconazole) targets (1) Oak wilt (*Ceratocystis fagacearum*) of oak; (2) Dutch elm disease (*Ceratocystis ulmi*) of elms; (3) Crabapple scab (*Venturia inaequalis*) of ornamental crabapple; and (4) Hawthorn leaf spot (*Diplocarpon theumenii*) of hawthorn; and (5) Anthracnose.
- Works on Oak wilt, Dutch elm disease, Crabapple scab, Hawthorn leaf spot and Anthracnose.
- This ready to use fungicide is highly effective and is designed to kill (control) (suppress) listed target pests on oak, elms, hawthorn, and ornamental crabapple

Promotional options:

- Save up to \$(x) on (your) next purchase
- (X)% free (more)
- Great value
- Bonus size
- Reasonably priced
- Additional savings
- Cost saving consumables
- Economical
- Invest in labor rather than equipment (machinery)

PACKAGING RELATED CLAIMS:

- Connect directly to tree
- Controlled delivery
- Convenient
- Quick connect applicator
- New(!)
- Quick connect applicator (device)
- Quick connect injection (applicator) (device)
- Quick & (and) easy to use
- Delivers direct treatment
- Direct injection (inject) (injecting)
- Easy
- Easy and convenient
- Easy to store (and dispose) (see instructions)
- Easy to use
- Eliminate(s) mixing
- The easy way to treat (with TEBUJECT 16)
- The easier way to treat (with TEBUJECT 16)
- No (more) hand fatigue
- No constant trigger squeezing
- No more pumping
- No pumping just inject
- No cumbersome set up
- No equipment clean up
- No costly machines or bulky equipment
- No high pressure forced delivery
- No product wastage
- No direct contact with product solutions if used according to directions
- Only takes a few minutes to apply (and lasts all season long)
- Precise control for maximum accuracy
- Prepackaged tebuconazole active ingredient
- Consistent injection for maximum accuracy
- No more tired (aching) hands
- Fast and easy application
- Easy to use application (injection)
- Easy to use injection
- Change the way you(tree inject) (inject)
- No more spray! Inject!
- Ideal for large or small jobs (areas)
- Great for large or small jobs (areas)
- Precise control
- The easier way to control pests (disease)
- The easier way to suppress pests (disease)
- Easier, more economical
- Save (Saves) time and energy
- Give your hands a break
- Convenient
- Effective
- Efficient (concentrations)
- Economical
- No more bending over
- Fast and easy application
- Full and efficient delivery
- Improved Applicator (application) Device!
- Simple!
- Improved Applicator (Application) System! (Device!)
- Improved Applicator (Application)!
- Improved!
- Improved for lasting (better) results!
- New and Improved!
- No (More) Hand Fatigue!
- No Mix, No Mess

- No more pumping, no more pulling, just inject
- No spray! Just inject!
- No more tired (aching) hands
- Minimal investment in equipment and consumables
- Precise control for maximum accuracy
- Quick & Easy to Use
- Quick (and) natural absorption
- Save (Saves) time and energy
- Simplified equipment
- Simplified calculations
- Simplified pre-filled ready to use devices
- Targeted injection
- Target infested spots
- The easy (-ier) way to control pests (and disease)
- The easy way to inject
- The fast and easy way to inject!
- You're always ready to inject!
- Change the way you (tree) inject
- (New) Comfort injector
- Treat(ment) of more trees in less time