



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUL 20 1995

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

DowElanco 9330 Zionsville Road Indianapolis, Indiana 46268

Attention: Merlyn L. Jones, Ph.D.

Subject: Cutless Tree Implants

EPA Registration No. 62719-237

Your letter and label amendment application dated

June 6, 1995

Dear Dr. Jones,

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, is acceptable provided that you:

- 1. Make the labeling changes listed below before you release the product for shipment bearing the amended labeling:
 - a. Change the Net Contents expression so that the contents are expressed as English units of weight or liquid measure (i.e., liquid ounces per implant).
 - b. Include on the front panel the following exclusionary statement, to clearly remove this product from the scope of the Worker Protection Standard (WPS):

"Not for use on trees being grown for sale or other commercial use, or for commercial seed production, or for the production of timber or wood products, or for research purposes."

This is pre-approved standard language found in PR Notice 93-11, Supplement F, \$II.C. If this is not acceptable to you then you will have to add WPS language to the subject label.

2. Submit one (1) copy of your final printed labeling before you release the product for shipment.

1-11

There is another matter concerning this product which you must attend to. Our records do not indicate that you have ever submitted storage stability data for the subject product, as you were required to do within fifteen (15) months in this product's Notice of Pesticide Registration (dated December 2, 1992). Therefore, we must require you to either cite a MRID Number(s) for these data, submit the data, or provide the Agency with a date certain by which these data will be submitted. Failure to do so could result in adverse regulatory action being taken against the subject product.

A stamped copy of the labeling is enclosed for your records.

If you have any questions about this letter, please contact John Bazuin at (703)305-5611.

Sincerely yours,

And

James M. Stone Acting Product Manager (22) Fungicide-Herbicide Branch Registration Division (7505C)

Attachment: A label copy stamped "ACCEPTED with COMMENTS"

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Cutless* Tree Implant

EPA Reg. No. 62719-237

Current label text based on EPA-accepted copy dated December 2, 1992.

Proposed Revisions:

 Environmental Hazards: Proposed statement which would have allowed application in wetlands during "seasonably dry" periods was withdrawn in response to EPA rejection of January 23, 1995 application for amendment.

Directions for Use: Minor editing for clarity, optimize product effectiveness and minimize any
potentially negative impact on target plants.

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[Editor's note: Added text is underlined and deleted text denoted by strike-through.]

Sites expanded to "Trees" (see p. 6) Did they ever submit Storage Stability data.

ACCEPTED
with CONEMENTS
In EPA Letter Dound:

M. 30 005

Under the Federal Insecticide Fungicide, and Rudenticide Act as amended, for the presidide regimered under EPA Reg. No. 103719 - 237

Compared to 12/2/92 "ACCEPTED with conmENTS" labela (booklet) or the 1/5/95 non-accepted label (base label). 3

page '

(Base Label)
(Logo) DowElanco

Cutless* Tree Implant

A trunk implanted plant growth regulator for the reduction of terminal growth and blomass production of non-crop trees.

Active ingredient:

flurprimidol: α-(1-methylethyl)-α-[4-(trifluoromethoxy)phenyl]-5-pyrimidinemethanol 93.6%
Inert Ingredients 6.4%
Total 100.0%
Each Cutless Tree Implant contains 1 gram of active incredient.

Precautionary Statements

Hazards to Humans and Domestic Animals Keep Out of Reach of Children

CAUTION & Font size increased

Harmful If Swallowed • Causes Eye Irritation

Avoid contact with eyes, skin, or clothing. Wear impermeable gloves when handling this product. Surgical type gloves may be used to aid in handling. Wash thoroughly with soap and water after handling.

First Aid

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

If in eyes: Flush eyes with plenty of water. Call a physician if imitation develops.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops.

Environmental Hazards

Application by methods other than as a tree implant may cause growth regulation effects in nontarget plants. 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 washwaters.

Refer to inside of label booklet for additional precautionary information and Directions for Use deleted including Storage and Disposal.

NOTICE: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-237

EPA Est. 1471-IN-5

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Specialty Growth Regulator

Net Contents 250 Implants

Fout size

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(Cutless Tree Implants, Laminated Booklet) (Laminated Booklet Cover) (Logo) DowElanco

Cutless* Tree Implant

A trunk implanted plant growth regulator for the reduction of terminal growth and biomass production of non-crop trees.

Active ingredient:

flurprimidol: α-(1-methylethyl)-α-[4-(trifluoromethoxy)-	
phenyl]-5-pyrimidinemethanol	93.6%
Inert Ingredients	6.4%
Total	
Each Cutless Tree Implant contains 1 gram of active ingredient.	

Keep Out of Reach of Children

CAUTION

Refer to inside of label booklet for additional precautionary information and Directions for Use including Storage and Disposal..

Notice: Read the entire label before using. Use only according to label directions. Before buying or using this product, read "Warranty Disclaimer" and "Limitation of Remedies" inside label booklet.

In case of emergency endangering health or the environment involving this product, call collect 517-636-4400.

Agricultural Chemical: Do not ship or store with food, feeds, drugs or clothing.

EPA Reg. No. 62719-237

EPA Est. 1471-IN-5

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DowElanco • Indianapolis, IN 46268 U.S.A.

Specialty Growth Regulator

Net Contents 250 Implants

Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

PRECAUCION

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

Harmful If Swallowed - Causes Eye Irritation

Avoid contact with eyes, skin, or clothing. Wear impermeable gloves when handling this product. Surgical type gloves may be used to aid in handling. Wash thoroughly with soap and water after handling.

First Aid

If swallowed: Do not induce vomiting. Call a physician or Poison Control Center. If available, administer activated charcoal (6-8 heaping teaspoonfuls) with a large quantity of water. Do not give anything by mouth to an unconscious person. Immediately transport to a medical care facility and see a physician.

If in eyes: Flush eyes with plenty of water. Call a physician if irritation develops.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation develops.

Environmental Hazards

Application by methods other than as a tree implant may cause growth regulation effects in nontarget plants. 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 washwaters.

Directions for Use

It is a violation of federal law to use this product in a manner inconsistent with its labeling. Read all Directions for Use carefully before applying.

Storage and Disposal

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

Storage: Store in original container only.

Pesticide Disposal: Wastes resulting from the use of this product which cannot be used according to label directions should be disposed of at an approved waste, disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incinerator, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

General Information

Cutless* Tree Implant is a plant growth regulator are recommended for growth suppression in a variety of non-crop tree species. Cutless Tree Implants retard request vegetative growth and can significantly reduce the volume of biomass that must be removed from trees when trimming excurs:

Growth suppression is achieved through inhibition of gibberellin biosynthesis resulting in reduced internodal elongation in terminal shoot growth. Smaller leaves and intensified greening occur in some species. Active ingredient from the trunk implant treatments is translocated through the xylem to growing leaves and stems and provide long-term growth suppression.

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Cutless Tree Implants may be installed at any time of year; however, the most rapid uptake and translocation occurs from treatments made from two menths prior to spring budbreak until leaves are fully developed. Cutless Tree Implants should be installed just prior to or during the most rapid period of water uptake where trees are actively transpiring. This period occurs from one month prior to bud swell to just before color change in the fall. Scheduling conflicts may require application during the dormant season, which is acceptable. Where pruning is required, best results may be achieved when application is made prior to or in conjunction with pruning. Growth suppression may not be evident until the year following treatment. Repeat applications can be made once growth regulator effects start to decline. In follow-up treatments, reduced application rates may be required on certain species to avoid over-regulation of terminal growth.

Use Precautions

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Cutiess Tree Implants should not be installed in trees under the following conditions:

- Trees with large wounds, lightning strikes, dead portions of crown, general poor health and vigor, or disease.

 Trees with large wounds, lightning strikes, dead portions of crown, general poor health and vigor, or disease.
- Sugar maple trees or any other trees that may be tapped for sugar
- Fruit or nut trees which may be harvested for food or feed.
- · Trees under severe stress from drought.
- Do not reapply until growth reduction symptoms begin to disappear. Rates should be reduced for trees that have experienced heavy crown removal.

Tree implant Techniques

Cutless Tree Implants should be installed in a manner which results in even distribution of the active ingredient throughout the above ground portion of the tree. The number of implants required should be determined by measuring the tree diameter approximately 4 4.5 feet above the ground to accurately determine the required dosage in grams of active ingredient per inch of diameter.

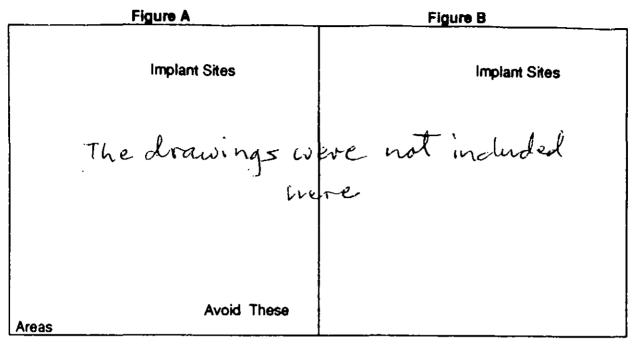
Space the holes for implants evenly around tree near the ground line. Areas to avoid are regions directly over girdling roots or adjacent to trunk damage abrasions and stem defects. Whenever possible, implants should be placed directly above a buttress root in the crown of the flare (A). If a large flare exists, place two or more implants in the same flare but in the sides of the root so that placement is directly into the shoulders (B). While the ideal implant spacing interval is six to eight inches, the spacing can be altered to avoid centering in the sinus between buttresses. If an excessive amount of holes are needed for the high rates (1.0 and 1.5 gram) two implants can be inserted at the same entry point by drilling a "V" and placing one implant in each side of the "V".

Each implant should be firmly seated into the tree trunk one inch below the bark. Holes should be drilled with a 3/8" self centering (brad point) spiral bit. Stop collars or tape can be used to set hole depths (1 inch plus bark thickness) on the drill bit. Each hole should be filled or flushed with water from a squirt bottle prior to implant insertion.

Implants can be installed at anytime of the year. However, best results may be achieved what pluned in the tree during active growth or 2-3 months prior to active growth. During periods when trees are in full leaf, best results may be obtained if installation is made when moisture stress is low. This can be accomplished by installing implants after significant rainfall/irrigation; or in early morning to avoid moisture stress induced by transpiration moisture loss in mid-day.

Holes may be plugged covered with bark dressing with pre-out wooden dowels or colored latex caulk. If using eaulk, use Use sparingly (just enough to seal hole). Do not apply pressure and enclose the implant.

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Application Rates for Cutiess Tree Implants & Fort size increase

Each implant contains a measured dose of growth regulator (1 gram of active ingredient). Use the table below to determine the number of Cutless Tree Implants to be placed in each tree according to tree diameter. Trees which have been heavily pruned and have small crowns relative to diameter should receive the low rates within the appropriate species group. <u>Trees not specifically identified on this label may be treated if all other label recommendations are followed.</u>

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	Implant	Dosage Guid	ie	_ ·
Diameter of Tree 4 ft Above the Ground (Inches)	Group 1 Required Number of Implants per Tree		Group 2 Required Number of Implants per Tree	
	0.50g Rate	0.75g Rate	1.00g Rate	1.50g Rate
6	3	4	6	9
7	3	5	7	10
8	4	6	8	12
9	4	7	9	13
10	5	7	10	15
11	6	8	11	16
12	6	9	12	18
13	7	10	13	19
14	7	10	14	21
15	8	11	15	22
16	8	12	16	24
17	9	13	17	26
18	9	13	18	27 .
19	10	_14	19	28
20	10	15	20	30
21	11	16	21	31
22	11	16	22	33
23	12	17	23	34
24	12	18	24	36
25	13	19	25	37

26	13	19	26	39
27	14	20	27	40
28	14	21	28	42
29	15	22	29	43
30	15	22	30	45

Group 1 Species

Group 2 Species

Aspen Cottonwood Melaleuca Sycamore Willow, Black

Alder, Red	Maple, Norway
Ash /	Maple, Red
Black Olive	Maple, Silver
Black Cherry	Maple, Sugar
Black Locust	Oak, Laurel
Black Walnut	Oak, Live
Box Elder	Oak, Pin
Dogwood	Oak, Post
Elm, American	Oak, Red
Elm, Chinese	Oak, Southern Red
Elm, Siberian	Oak, Water
Elm Winand	Oak Willow

Elm, Winged Oak, Willow

Blue Gum Eucalyptus Sugarberry Hackberry Sweetaumt

†Do not exceed the 0.5 gram rate.

Note: Cutless is not recommended for application on conifers (e.g., pine, spruce, fir or juniper).

Warranty Disclaimer

DowElanco warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. DowElanco MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY. Cap. talized

Inherent Risks Of Use

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It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to the label instructions (including conditions noted on the label, such as unfavorable temperatures, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of DowElanco or the seller. All such risks shall be assumed by the buyer.

Limitation Of Remedies

The exclusive remedy for losses or damages resulting from the use of this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to, at DowElanco's election, one of the following:

- (1) Refund of purchase price paid by buyer or user for product bought, or
- (2) Replacement of amount of product used

DowElanco shall not be liable for losses or damages resulting from handling or use of this product unless DowElanco is promptly notified of such loss or damage in writing. In no case shall DowElanco be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer above and this Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of DowElanco or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or this Limitation of Remedies in any manner.

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