



U.S. ENVIRONMENTAL PROTECTION AGENCY
 Office of Pesticide Programs
 Registration Division (117505C)
 401 "M" St., S.W.
 Washington, D.C. 20460

EPA Reg. Number:
 62719-237

Date of Issuance:
 DEC 2 1992

NOTICE OF PESTICIDE:
 Registration
 Reregistration

(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

Cutless Tree Implant

Name and Address of Registrant (include ZIP Code):

Merlyn L. Jones, Ph.D.
 DowElanco
 9002 Purdue Road
 Indianapolis, IN 46268

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.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the labeling changes listed below before you release the product for shipment:

a. Add the phrase "EPA Registration No. 62719-237.

b. The correct name for Flurprimidol should be Flurprimidol...(4-(trifluoromethoxy) phenyl)-5...note that a "4" should be inserted in front of "(trifluoromethoxy)"

c. The net contents should be declared on the label or on the container.

Signature of Approving Official:

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Date:

d. Under "Environmental Hazards" add the statements:
"Do not apply directly to water, areas where surface water is present of to intertidal areas below the mean high water mark", and
"Do not contaminate water when disposing of equipment washwaters".

3. You must submit one year storage stability data 15 months after the above registration issuance date.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of your label is enclosed for your records.

Sincerely,

Cynthia Giles-Parker
Product Manager (22)
Fungicide-Herbicide Branch
Registration Division (H7505C)

Enclosure

(Logo) DowElanco

(Label Booklet)

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 -(trifluoromethoxy) phenyl]-5-pyrimidinemethanol	93.6%
Inert Ingredients	6.4%
Total	100.0%

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

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

EPA Reg. No. 62719-XXX

EPA Est. XXXX-XX-00

*Trademark of DowElanco

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

Specialty Growth Regulator

ACCEPTED
with **COMMENTS**
in EPA Letter Dated:

DEC 02 1992

Use only as directed on label. Do not use for purposes not intended. For the pesticide registered under EPA Reg. No.

62719-237

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Precautionary Statements

Hazards to Humans and Domestic Animals

CAUTION

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.

Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read all directions carefully before applying Cutless.

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 implants are recommended for growth suppression in a variety of non-crop tree species. Cutless tree implants retard vegetative growth and can significantly reduce the volume of biomass that must be removed from trees when trimming occurs.

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.

Cutless tree implants may be installed at any time of year; however, the most rapid uptake and translocation occurs from treatments made from two months prior to spring budbreak until leaves are fully developed. 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 to avoid over-regulation of terminal growth.

BEST AVAILABLE COPY

Use Precautions

Cutless 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 diseased.
- 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.

Tree Implant Techniques

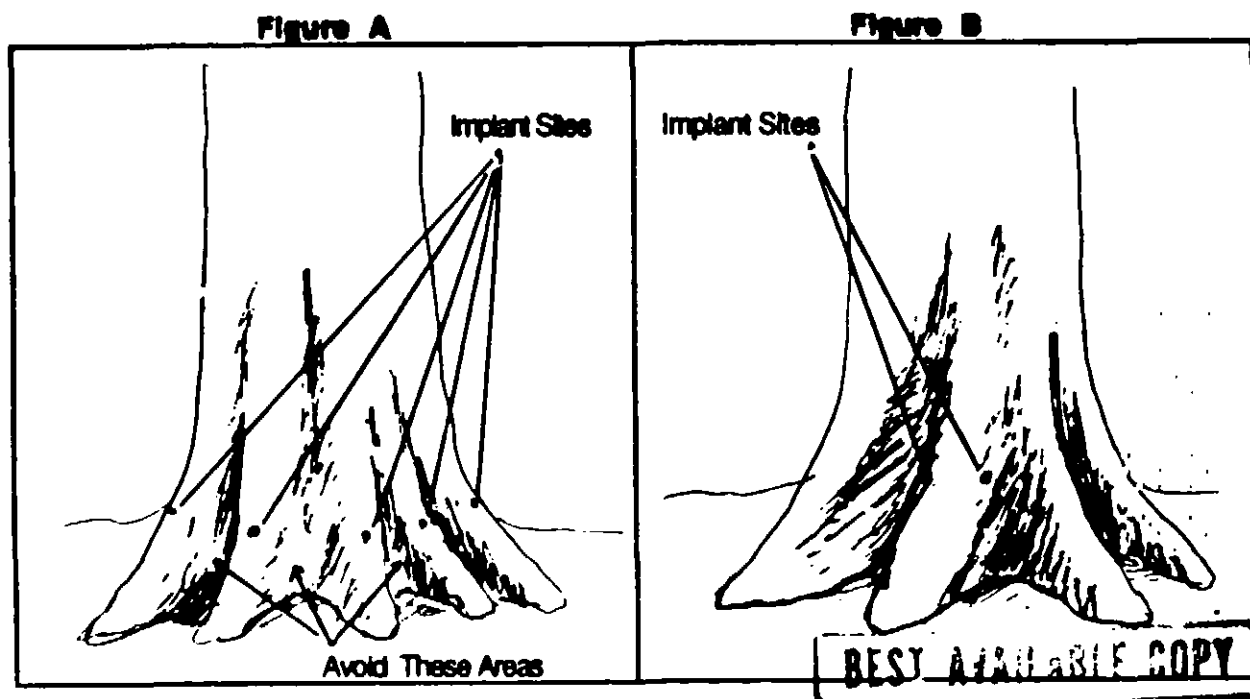
Cutless tree implants should be installed in a manner which results in even distribution of the active ingredient throughout the above ground portion of the tree. The number of implants required should be determined by measuring the tree diameter approximately 4 feet above the ground to accurately determine 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. 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 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 when placed 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 with pre-cut wooden dowels or colored latex caulk. If using caulk, use sparingly (just enough to seal hole). Do not apply pressure and enclose the implant.



Application Rates for Cutless Tree Implants
 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.

Implant Dosage Guide				
Diameter of Tree 4 ft Above the Ground (DBH)	Group 1		Group 2	
	Required Number of Implants per Tree		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

- Alder Red
- Ash
- Black Olive
- Black Cherry
- Black Locust
- Black Walnut
- Box Elder
- Dogwood
- Elm, American
- Elm, Chinese
- Elm, Siberian
- Elm, Winged
- Blue Gum Eucalyptus
- Hackberry

- Maple, Norway
- Maple, Red
- Maple, Silver
- Maple, Sugar
- Oak, Laurel
- Oak, Live
- Oak, Pin
- Oak, Post
- Oak, Red
- Oak, Southern Red
- Oak, Water
- Oak, Willow
- Sugarberry
- Sweetgum†

Group 2 Species

- Aspen
- Cottonwood
- Melaleuca
- Sycamore
- Willow, Black

†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.

INHERENT RISKS OF USE

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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revised 7/15/92