

FEB 16 1994

Dr. Merlyn L. Jones
DowElanco
9330 Zionsville Rd.
Indianapolis, IN 46268

Dear Dr. Jones:

Subject: Formulation Change
Pathfinder Herbicide
EPA Reg. No. 62719-176
Your submission dated April 2, 1993

The amendment referred to above, submitted in connection with registration under FIFRA sec. 3(c)(7)(A), is acceptable provided that you:

1. Submit and/or cited all data or other material required for registration/reregistration of your product under FIFRA sec. 3(c)(5) or FIFRA section 4 when the Agency requires all registrants of similar products to submit such data.
2. Submit five (5) copies of your final printed labeling incorporating the following changes before you release the product for shipment.
 - a. Revise your precautionary statements to read, "Harmful if swallowed, inhaled or absorbed through the skin. Avoid contact with skin, eyes, or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse".
 - b. Revise the skin, inhalation and oral statements of practical treatment as follows:

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IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF SWALLOWED: Call a physician or Poison Control center. Drink 1 or 2 glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.

- c. A revised Confidential Statement of Formula is needed. The nominal and certified limits for the active ingredient should read-- 14.3% for the upper and 12.9% for the lower

The acute toxicology and product chemistry data submitted with this application are acceptable. I have enclosed a copy of our reviews for your information.

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 bearing the amended labeling constitutes acceptance of these conditions.

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

Sincerely yours,

Robert J. Taylor
Product Manager 25
Fungicide-Herbicide Branch
Registration Division (H7505C)

enclosure

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[Front Cover of Booklet]

(logo) DowElanco

Pathfinder*

A ready-to-use herbicide for the control of woody plants on:

- Rights-of-way
- Forests
- Industrial sites
- Non-crop areas
- Rangeland and permanent pastures
- Non-irrigation ditch banks
- Wildlife openings including grazed areas on those sites

Active Ingredient:

triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxyethyl ester 13.6%

Inert Ingredients 86.4%

Acid Equivalent:

triclopyr - 9.81% - 0.75 lb/gal

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. 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. 62719-176
12167

EPA Est. 464-MI-1
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DowElanco • Indianapolis, IN 46268, U.S.A.

Specialty Herbicide

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

FEB 16 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide
Act as amended, this product is
registered under

62719-176

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[Page 2 of Booklet]

Precautionary Statements

Hazards to Humans and Domestic Animals

Keep Out of Reach of Children.

CAUTION

Causes Eye Irritation • Harmful If Swallowed, Inhaled Or Absorbed Through The Skin

Avoid contact with eyes, skin or clothing. Avoid breathing spray mists or vapors. Avoid contamination of food. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.

First Aid

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

If on skin: Flush skin with plenty of water. Get medical attention if irritation persists.

If swallowed: Do not induce vomiting. Call a physician.

Physical or Chemical Hazards

Combustible - Do not use or store near heat or open flame. Do not cut or weld container.

Environmental Hazards

This pesticide is toxic to fish. Keep out of lakes, ponds or streams. 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

Read all Directions for Use carefully before applying.

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

Ready-To-Use, No Mixing Required.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

Storage: Store above 28°F or agitate before use.

Pesticide Disposal: Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to applicable federal, state, or local procedures.

Container Disposal: Triple rinse (or equivalent) with 10 drops or more of a liquid hand soap and water or an oil based product such as kerosene or diesel fuel and spray rinsate on undesirable vegetation, in target area. Offer containers for recycling or reconditioning where allowed, or puncture and dispose of in a sanitary landfill, or by incineration if approved by state and local procedures.

Container Disposal for Refillable Containers: Close all openings which have been opened during use and replace all caps. Return the empty container to a collection site designated by DowElanco. If the container has been damaged and cannot be returned according to the recommended procedures, contact the DowElanco Customer Service Center at 1-800-258-1470 to obtain proper handling instructions.

General: Consult federal, state, or local disposal authorities for approved alternative procedures.

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General Information

Pathfinder herbicide is a ready-to-use product which is recommended for the control of unwanted woody plants through the use of basal bark application techniques in forests, rangeland and permanent pastures, and on non-crop areas including industrial manufacturing and storage sites, rights-of-way such as electrical power lines, communication lines, pipelines, road sides and railroads, fence rows, non-irrigation ditch banks and around farm buildings. Use on these sites may include application to grazed areas as well as establishment and maintenance of wildlife openings.

General Use Precautions

Apply this product only as specified on this label.

Do not use for manufacturing or formulating.

Do not apply this product through any type of irrigation system.

It is permissible to treat non-irrigation ditch banks, seasonally dry wetlands, flood plains, deltas, marshes, swamps, bogs, and transitional areas between upland and lowland sites. Do not apply to open water (such as lakes, reservoirs, rivers, streams, creeks, salt water bays or estuaries) nor to water present in fresh water wetlands, deltas, marshes, swamps, bogs or potholes, or to salt water marshes below the mean high water mark.

Do not apply Pathfinder herbicide directly to, or otherwise permit it to come into direct contact with grapes, tobacco, vegetable crops, flowers or other desirable broadleaf plants, and do not permit spray mists containing it to drift onto them.

Avoid Injurious Spray Drift: Applications should be made only when there is little or no hazard from spray drift. Very small quantities of spray, which may not be visible, may seriously injure susceptible plants. Do not spray when wind is blowing toward susceptible crops or ornamental plants near enough to be injured.

With ground equipment, spray drift can be reduced by using spray pressures no greater than are required to obtain adequate coverage; by using large droplet producing nozzle tips; and by spraying when wind velocity is low. Do not apply with nozzles that produce a fine droplet spray. Do not apply with an orchard type mist blower.

Do not apply on snow or frozen ground.

Untreated trees occasionally can be affected by movement of the herbicide through root grafting with the treated trees.

Since this herbicide moves within the treated plant, do not use Pathfinder on parts of a multiple stem plant if injury to the untreated portions (cut or standing stems) cannot be tolerated.

Do not apply on ditches used to transport irrigation water. Do not apply where runoff or irrigation water may flow onto agricultural land as injury to crops may result.

Be sure that use of this product conforms to all applicable regulations.

Grazing and Haying Restrictions

Grazing or harvesting green forage:

1) Lactating dairy animals

2.5 gallons/acre or less: Do not graze or harvest green forage from treated area for 14 days after treatment.

Greater than 2.5 gallons/acre: Do not graze or harvest green forage until the next growing season.

2) Other Livestock

2.5 gallons/acre or less: No grazing restrictions.

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Greater than 2.5 to 7.5 gallons/acre: Do not graze or harvest green forage from treated area for 14 days after treatment. Note: If less than 25% of a grazed area is treated, there is no grazing restriction.

Haying (harvesting of dried forage):

1) Lactating dairy animals

Do not harvest hay until the next growing season.

2) Other Livestock

2.5 gallons/acre or less: Do not harvest hay for 7 days after treatment.

Greater than 2.5 to 5 gallons/acre: Do not harvest hay for 14 days after treatment.

Greater than 5 gallons/acre: Do not harvest hay until the next growing season.

Slaughter Restrictions:

Withdraw livestock from grazing treated grass or consumption of treated hay at least 3 days before slaughter. This restriction applies to grazing during the season following treatment or hay harvested during the season following treatment.

Among The Woody Plant Species Controlled Are:

allanthus	hackberry	oak, water
alder, red	hazel	oak, white
alder, speckled	hercules club	olive, autumn
ash, green	hickory, mockernut	olive, Russian
ash, white	hickory, pignut	persimmon, common
aspen†	honeylocust	pine, jack
Australian pine	hornbeam (blue beach)	pine, loblolly
basswood	locust, black†	pine, ponderosa
beech, American	madrone, Pacific	pine, red
birch, black	manzanita, greenleaf	pine, white
birch, gray	maple, bigleaf†	poison ivy
birch, paper	maple, mountain	poison oak
blackberry	maple, red	poplar, balsam
black locust	maple, silver	redcedar, eastern
blackgum	maple, striped	salt cedar†
boxelder	maple, sugar	sassafras†
Brazilian pepper	maple, vine	sumac, smooth†
cherry, black†	mesquite†/††	sumac, staghorn†
cherry, choke	mountain-laurel	sweetgum
cherry, pin	oak, black††	sycamore
cottonwood	oak, blackjack††	tamarack
dogwood, flowering	oak, chestnut	tanoak
dogwood, red-osier	oak, post††	walnut
elm, American	tanoak	waxmyrtle
elm, winged†	walnut	willow
galberry	oak, red	yaupon
guava	oak, scarlet	yellow poplar

†Some resprouting may occur.

††Not recommended for streamline basal treatment.

†††Suppression only with streamline basal bark treatment.

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Approved Uses

Low Volume Basal Bark Treatment

To control susceptible woody plants with stems less than 6 inches in basal diameter, apply Pathfinder with a backpack or knapsack sprayer using low pressure and a solid cone or flat fan nozzle. Spray the basal parts of brush and tree trunks in a manner which thoroughly wets the lower 12 to 15 inches of stems, including the root collar area, but not to the point of runoff. Herbicide concentration should vary with size and susceptibility of species treated. Apply at any time, including the winter months, except when snow or water prevent spraying to the ground line.

Treatment of Cut Stumps

To control resprouting, apply undiluted Pathfinder to wet the area adjacent to the cambium and bark around the entire circumference and the sides of cut stumps. Sides of stumps should be thoroughly wetted down to the root collar area, but not to the point of runoff. Treatments may be applied throughout the year, except when snow or water prevent spraying to the ground line. Control may be reduced with treatment during periods of moisture stress as in late summer.

Streamline Basal Bark Treatment (Southern States)

To control or suppress susceptible woody plants for conifer release or in rangeland and pasture, apply Pathfinder with a backpack or knapsack sprayer using equipment which provides a directed straight-stream spray. Apply sufficient spray to one side of stems less than 3 inches in basal diameter to form a treated zone that is 6 inches in height. When the optimum amount of spray mixture is applied, the treated zone should widen to encircle the stem within approximately 30 minutes. Treat both sides of stems which are 3 to 4 inches in basal diameter. Direct the spray at bark that is approximately 12 to 24 inches above ground. Pines (loblolly, slash, shortleaf, and Virginia) up to 2 inches in diameter breast height (dbh) can be controlled by directing the spray at the point approximately 4 feet above ground. Best results are achieved when applications are made to young vigorously growing stems which have not developed the thicker bark characteristic of slower growing, understory trees in older stands. This technique is not recommended for scrub and live oak species, including blackjack, turkey, post, live, bluejack and laurel oaks. Apply from approximately 6 weeks prior to hardwood leaf expansion in the spring until approximately 2 months after leaf expansion is completed. Do not apply when snow or water prevent spraying at the desired height above ground level.

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. Crop injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable temperature, 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 Buyer.

Limitation of Remedies

The exclusive remedy for losses or damages resulting from 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.

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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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[Base Label of Datapak - Pathfinder]

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Pathfinder*

Active Ingredient:

triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxyethyl ester 13.6%

Inert Ingredients 86.4%

Acid Equivalent:

triclopyr - 9.81% - 0.75 lb/gal

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Keep Out of Reach of Children

CAUTION

Causes Eye Irritation - Harmful If Swallowed, Inhaled Or Absorbed Through The Skin

Avoid contact with eyes, skin or clothing. Avoid breathing spray mists or vapors. Avoid contamination of food. Wash thoroughly after handling. Remove and wash contaminated clothing before reuse.

First Aid

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

If on skin: Flush skin with plenty of water. Get medical attention if irritation persists.

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Combustible - Do not use or store near heat or open flame. Do not cut or weld container.

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General: Consult federal, state, or local disposal authorities for approved alternative procedures.

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EPA Reg. No. 62719-176
12167

EPA Est. 464-MI-1
900-00xxxx

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Specialty Herbicide

Draft labeling for new formulation of Pathfinder herbicide prepared 02/12/93

Amendments:

The following changes were made to labeling for Pathfinder Herbicide (EPA Reg. No. 62719-176):

- 1) Product name replaced with formulation number (Pathfinder).
- 2) Added EPA recommended wetlands statement to "Environmental Hazards" section.
- 3) Directions for Use: reformatted into "General Information" and "Approved Uses" sections.
- 4) General Use Precautions: use precautions for application in areas that are periodically wet added.

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