

NOV 30 1992

Jacqueline S. Wujek, Ph.D.
DowElanco
9002 Purdue Road, Quad III
Indianapolis, IN 46268

Dear Dr. Wujek:

Subject: Transline® Herbicide
EPA Registration No. 62719-73
Application Dated November 2, 1992, Amendments To
Clarify Text, Revise List of Weeds Controlled,
Add Spray Drift Control Agents, Remove Prohibition
Against Aerial Application, Add Directions To
Reduce spray Drift from Aerial Applications, and
To Identify Minimum Spray Volumes To Assure
Adequate Coverage

The proposed amendments to the use directions for the
subject pesticide product registered under the Federal
Insecticide, Fungicide and Rodenticide Act as amended
have been reviewed and are acceptable provided that
you:

1. Revise the proposed change in the "High-Volume Leaf
Stem Treatment" that reads: "Thorough coverage is
necessary for good results, therefore, apply as a
complete spray-to-wet foliar." That sentence
should include the word "spray" or "application",
for closure of description.
2. Revise to "Limitation of Remedies" section to
reflect this Agency's position in regard to
such overdrawn disclaimers for pesticide products,
see enclosed Memorandum, "Warranties, Disclaimers,
and Limitations of Pesticide Labels", Dated July 31,
1978.
3. Submit five (5) printed copies of the final printed
label before releasing the product for shipment.

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

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

Sincerely yours,

Joanne I. Miller
Product Manager (23)
Fungicide-Herbicide Branch
Registration Division (H-7505C)

Enclosures (2)

E.Wilson: Diskette #NC2: 11-25-92

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Transline*

Vegetation
Management

Specialty Herbicide

For selective control of broadleaf weeds in non-cropland areas, industrial manufacturing and storage sites, rights-of-way, and wildlife openings, including grazed areas on these sites

Active Ingredient:

clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid,
monoethanolamine salt.....40.9%

Inert Ingredients.....59.1%

Acid Equivalent:

3,6-dichloro-2-pyridinecarboxylic acid -
31% - 3 lb/gal

EPA Reg. No. 62719-73

EPA Est. 464-MI-1

Net Contents 2.5 gal

Precautionary Statements

Keep Out of Reach of Children

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.

Causes Eye Injury • Harmful If Inhaled Or Absorbed Through Skin

Avoid contact with eyes, skin or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

First Aid

If in eyes: Flush with plenty of water. Get medical attention if irritation persists.

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

Environmental Hazards

Do not contaminate water when disposing of equipment washwaters. Do not contaminate water used for irrigation or domestic purposes. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.

Clopyralid is a chemical which can travel (seep or leach) through soil and under certain conditions contaminate groundwater which may be used for irrigation or drinking purposes. Users are advised not to apply clopyralid where soils have a rapid to very rapid permeability throughout the profile (such as loamy sand to sand) and the water table of an underlying aquifer is shallow, or to soils containing sinkholes over limestone bedrock, severely fractured surfaces, and substrates which would allow direct introduction into aquifer. Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

Physical or Chemical Hazards

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

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

In case of an emergency endangering life or property involving this product, call collect 517-636-4400.

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

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ACCEPTED
with COMMENTS
in EPA Letter Dated:

30 NOV 1990

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended, this pesticide
registered under EPA Reg. No.

62719-73

*
Transline

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 above 28°F or warm to 40°F and agitate before use.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Plastic Container Disposal: Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Metal Container Disposal: Do not reuse container. Triple rinse (or equivalent). Puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities.

Sprayer Clean-Out: To avoid injury to desirable plants, equipment used to apply Transline herbicide should be thoroughly cleaned before reusing to apply any other chemicals.

1. Rinse and flush application equipment thoroughly after use at least three times with water. Dispose of rinse water in non-cropland area away from water supplies.
2. During the second rinse, add 1 qt of household ammonia for every 25 gallons of water. Circulate the solution through the entire system so that all internal surfaces are contacted (15-20 min.). Let the solution stand for several hours, preferably overnight.
3. Flush the solution out of the spray tank through the boom.
4. Rinse the system twice with clean water, recirculating and draining each time.
5. Nozzles and screens should be removed and cleaned separately.

General Information

Transline herbicide is recommended for selective, postemergence control of broadleaf weeds in non-cropland areas including equipment pathways, industrial manufacturing and storage sites and rights-of-way such as along roadsides, electrical lines and railroads. Use on these sites may include application to grazed areas as well as establishment and maintenance of wildlife openings and forest spot application adjacent to these sites.

General Use Precautions

This product can affect susceptible broadleaf plants directly through foliage and indirectly by root uptake from treated soil. Therefore, do not apply Transline directly to or allow spray drift to come in contact with vegetables, flowers, grapes, tomatoes, potatoes, beans, lentils, peas, alfalfa, sunflowers, soybeans, safflower, or other desirable broadleaf crops and ornamental plants or soil where these sensitive crops will be planted the same season.

Do not contaminate irrigation ditches or water used for irrigation or domestic purposes.

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

Avoid Spray Drift: Applications should be made to avoid spray drift since very small quantities of the spray, which may not be visible, may severely injure susceptible crops during both growing and dormant periods. Use coarse sprays to minimize drift. A drift control or deposition agent such as Naleo-Trol may be used with this product to aid in reducing spray drift. If used, follow all use recommendations and precautions on the product label.

Ground Application: To minimize spray drift, apply Transline in a total spray volume of 10 or more gallons per acre as large-droplet, low-pressure spray. Refer to manufacturer's recommendations for additional information on gallons per acre, spray pressure, sprayer speed, nozzle types and arrangements, nozzle heights above the target canopy, etc., for respective application equipment. With ground equipment, spray drift can be lessened by keeping the spray boom as low as possible; by using no more than 20 pounds spraying pressure with large droplet-

low spraying

tips, and

producing nozzle tips by spraying when wind velocity is low; and by stopping all spraying when wind exceeds 6 to 7 miles per hour. Do not apply with hollow cone-type insecticide or other nozzles that produce a fine-droplet spray.

Insert 1.

~~Do not apply by aircraft.~~

Insert 2.

Do not transfer livestock from treated grazing areas onto sensitive broadleaf crop areas without first allowing 7 days of grazing on an untreated pasture. Otherwise, urine may contain enough clopyralid to cause injury to sensitive broadleaf plants.

Straw from treated areas, or manure from animals that have grazed treated areas, cannot be used for composting or mulching on ground where susceptible crops may be grown the following season. To promote herbicide decomposition, plant material should be evenly incorporated or burned. Adequate moisture is also required to promote breakdown of plant residues which contain clopyralid.

Do not use in a greenhouse. Excessive amounts of this herbicide in the soil may temporarily inhibit seed germination or plant growth.

Weeds Controlled

acacias		ladythumb†
artichoke, Jerusalem		lettuce, prickly
buckwheat, wild		locoweed, white
buffalobur†		locoweed, Lambert
bull thistle		marshelder
burdock, common		mesquite
Gnaphalium		musk thistle (rosette to bud)
(rosette to bud)		nightshade, Eastern black
chamomile, false		nightshade, cutleaf
(scentless)		nightshade, hairy
chamomile, mayweed		oxeye daisy
(dogfennel)		pineappleweed
clever, sweet		ragweed, common
clover, red		ragweed, giant
cocklebur, common		salsify, meadow (goatsbeard)
coffee weed		sicklepod
cornflower		smartweed, green†
(bachelor button)		sorrel, red
dandelion		sowthistle, annual
dock, curly		sowthistle, perennial†
groundsel, common		starthistle, yellow
hawkbeard, narrowleaf		sunflower (common and wild)
horsetweed		teasel, common
jimsonweed		thistle, bull
knapweed, diffuse		thistle, Canada (rosette to bud)
knapweed, Russian†		thistle, musk (rosette to bud)
knapweed, spotted		vetch
kudzu		

clover, black medic
clover, hop

clover, white

Desirable broadleaf plants

Naleo-Trol, 38-F or 41-A

† These weeds may only be suppressed. Suppression is a visual reduction in weed competition (reduced population or vigor) as compared to untreated areas. The degree of weed control and duration of effect will vary with weed size and density, spray rate and coverage, and growing conditions before, during, and after the time of treatment.

Application

Timing

Apply to actively growing weeds. Extreme growing conditions such as drought or near freezing temperatures prior to, at, and following time of application may reduce weed control. Only weeds which are emerged at the time of application will be affected. Wet foliage at the time of application may decrease control. The treatment with Transline will be rainfast within 2 hours after application.

Rate

Generally, lower labeled application rates will be satisfactory for young, succulent growth of sensitive weed species. For less sensitive species, perennials, and under conditions where control is more difficult (plant stress conditions such as drought or extreme temperatures, dense weed stands, and/or larger weeds), the higher rates will be needed.

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Coverage

Adequate spray coverage and drift control are important. Obtaining a balance between spray coverage and drift control may sometimes be difficult but can be achieved provided the applicator understands the factors affecting coverage and drift. Factors affecting spray coverage include spray volume, and weed density. As weed density increases, spray volume should be increased to obtain equivalent weed control. Refer to manufacturer's recommendations for information on the relationship between gallons per acre, spray pressure, sprayer speed, nozzle type and arrangement, nozzle height above the target canopy, droplet size, and drift potential for respective application equipment. Use equipment and nozzle types which are designed for herbicide application. Reducing total spray volume may result in decreased coverage and weed control. Use enough total spray volume and delivery system to provide thorough coverage and a uniform spray pattern. Do not apply where spray drift may be a problem due to proximity of susceptible crops or other desirable plants.

Effectiveness on Perennial Weeds

Transline will control the initial topgrowth and inhibit regrowth during the season of application (season-long control). At higher use rates shown on this label, Transline may cause a reduction in shoot regrowth in the season following application; however, plant response may be inconsistent due to inherent variability in shoot regrowth from perennial root systems.

may increase effectiveness of

Use of Adjuvants

Addition of surfactants, crop oils, or other adjuvants is not usually necessary when using Transline Herbicide. Adding a surfactant to the spray mixture may increase effectiveness on weeds. If an adjuvant is added to the spray solution, follow all manufacturer use guidelines.

Tank Mixes

When tank mixing, read and follow the label of each tank mix product used for precautionary statements, directions for use, weeds controlled, and geographic and other restrictions. Use in accordance with the most restrictive of label limitations and precautions. No label dosages should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

Non-Cropland Use

For use on non-cropland areas such as industrial manufacturing and storage sites and rights-of-way such as along roadsides, electrical power lines, communication lines, pipelines and railroads, including grazed areas on these sites and forest spot application adjacent to these sites.

(Ground or Aerial)

Broadcast Application (Ground)

For control of broadleaf weeds, apply 1/4 to 1 1/3 pints of Transline per acre (equivalent to 0.09 to 0.5 lb ae per acre). Non-ionic surfactant should be used in spray mixtures at 1 to 2 quarts per 100 gallons of spray mixture. The lower rate of 1/4 pint per acre provides acceptable control of weeds only under highly favorable plant growing conditions and when plants are no larger than 3 to 6 inches tall. Where Canada thistle or knapweeds are the primary pest, best results are obtained by applying 2/3 to 1 1/3 pints of Transline per acre after basal leaves are produced. For roadside applications, spray volumes of 25 to 50 gallons per acre will ensure adequate coverage. Transline can be tank mixed with diesel oil or equivalent inert agent approved for use on agricultural crops. Established grasses are tolerant but new grass seedlings may be injured to varying degrees until the grass has become well established.

High-Volur e Leaf Stem Treatment (Woody Plants)

For control of brush, use 1 to 3 quarts of Transline per 100 gallons of total spray solution. Thorough coverage is necessary for good results, therefore, apply as a complete spray-to-wet foliar application of more than 1/2 pint of Transline per acre. To minimize drift, use a maximum spray pressure of 50 psi and keep sprays no higher than the tree crowns. Trees taller than 8 feet in height may be hard to treat efficiently and to obtain necessary coverage.

Do not apply by air.

low spray pressure

Unsatisfactory control may result if application is made when brush and weeds are under severe drought stress or other conditions that inhibit good growth. Environmental conditions may influence results considerably. For best results on mesquite, apply in the spring or early summer during the period 40 to 90 days after the first green growth appears and when soil moisture is adequate for good growth. Soil temperatures of 75° to 83° F at a 12 to 18 inch depth are optimal for good plant kills. Soil temperature of less than 75° F at this depth will reduce the ultimate root kill of mesquite.

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 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.

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.

*Trademark of DowElanco
DowElanco, Indianapolis, IN 46268, U.S.A.

LABEL CODE 140-20-002-
EPA APPROVAL 0045504

DATE CODE 78e

Revisions include:

- 1) Wildlife openings added to approved sites and grazing allowed on treated areas.
- 2) Added bull thistle, kudzu and common tassel to weeds controlled.
- 3) Rainfast time reduced to 2 hours; Telar as adjuvant deleted; and spray drift precautions edited.

Insert 4.

application, including all leaves, stems, and root collars but not to exceed a total application rate of more than 1 1/3 pints of Transline per acre.

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Transline Inserts

Insert 1.

Keep operating spray pressures at the lower end of the manufacturer's recommended pressure range for the specific nozzle type used. Low pressure nozzles are available from spray equipment manufacturers. Select nozzles and pressures that provide adequate plant coverage but minimize the production of fine spray particles.

Insert 2.

Aerial Application

Drift can be lessened by using straight stream nozzles directed straight back; by using a spray boom no longer than 3/4 the rotor or wing length of the aircraft; by using drift control systems or use of drift control additives such as Nalco-Trol, 38F or 41A; and by keeping spray pressures low enough to provide coarse spray droplets. Do not use a thickening agent with the Microfoil or Thru-Valve booms, or other systems which cannot accommodate thick sprays. Spray only when wind velocity is low (follow state regulations).

Insert 3.

Spray volumes of 20 gallons or more per acre for ground roadside and rights-of-way applications and spray volumes 5 gallons or more per acre or more for aerial applications will ensure adequate coverage.

Insert 4.

Revisions Include:

1. Text edited for clarity.
2. Revised "Weeds Controlled" list.
3. Added 38-F and 41-A drift control agents in addition to Nalco-Trol.
4. Removed prohibition against aerial application.
4. Added instructions for reducing spray drift from aerial application.
6. Provided minimum spray volume for ground and aerial application required to provide adequate coverage.