

PM 25

10182-324

File  
1 of 27



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**WASHINGTON, D.C. 20460**

**FEB 18 1994**

**BECKY RHODES  
ZENECA INC  
1800 CONCORD PIKE  
WILMINGTON, DE 19897**

**OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES**

**Subject: Label Amendment Submission of 08/09/93 in Response to PR Notice 93-7  
EPA Reg. No. 10182-324  
TOUCHDOWN 6 HERBICIDE**

**Dear Registrant:**

The labeling cited above and submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is accepted subject to the comments reflected on the enclosed sheet. A copy of your proposed labeling stamped "ACCEPTED WITH COMMENTS" is enclosed.

**WHAT THIS ACCEPTANCE MEANS:**

Based on your certification, the Agency has accepted the labeling changes that are necessary to comply with the Worker Protection Standard (WPS) labeling requirements of 40 CFR part 156, subpart K, described in PR Notices 93-7 and 93-11. Any other labeling changes submitted in connection with this amendment application but not directly related to compliance with the WPS have not been reviewed or accepted by the Agency. If you wish to make such changes, you must submit a separate amendment application proposing them. If your product is currently suspended, the acceptance of this labeling amendment does not affect the suspension in any way.

**WHAT YOU NEED TO DO NEXT:**

By the next label printing make all the specified changes to your labeling. Send to EPA one (1) copy of the final printed labeling:

- **BEFORE** selling or distributing any product bearing the final printed labeling
- AND**
- **WITHIN** one year from date of this acceptance.



**Recycled/Recycle**  
Printed with Soy/Canola ink on paper that  
contains at least 50% recycled fiber

2.7.27

Page 2

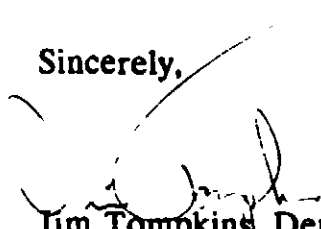
Submit the final printed labeling via the U.S. Postal Service to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs (7505C)  
U.S. Environmental Protection Agency  
401 M Street, SW  
Washington, D.C. 20460-0001

Hand or courier deliveries of final printed labeling may be made to:

Document Processing Desk (FIN-LABEL)  
Office of Pesticide Programs  
Room 266A, Crystal Mall 2  
1921 Jefferson Davis Highway  
Arlington, VA 22202

Sincerely,



Jim Tompkins, Deputy Chief  
Registration Support Branch  
Registration Division (7505W)

Attachment

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division

Becky Rhodes  
ZENECA INC  
1800 CONCORD PIKE  
WILMINGTON DE 19897

Comment for: EPA Reg Nr.10182-324  
TOUCHDOWN 6 HERBICIDE

The following specific comments pertain to your WPS  
labeling submission concerning the product  
cited above:

User Safety Recommendations must either be placed in a box  
or printed on the label in a contrasting color from  
surrounding text.

The Agricultural Use Requirements section must be located in  
a clearly separate box on the product labeling -- with lines  
or other graphic indicators (such as contrasting color) to  
separate the section from the surrounding text.

You have incorrect wording in the first paragraph in the  
Agricultural Use Requirements box on your proposed label.  
That paragraph must contain the exact wording of the  
paragraph shown as "2" in Section F on Part 2 of the Product  
Worksheet in Supplement Three-A to PR Notice 93-7.

You have incorrect wording in the second-to-last sentence in  
the first paragraph in the Agricultural Use Requirements box  
on your proposed label. The sentence must be as follows:  
"It also contains specific instructions and exceptions  
pertaining to the statements on this label about personal  
protective equipment (PPE), notification to workers and  
restricted-entry interval."

Delete the crossed-out statements on your proposed label.  
They are redundant statements or phrases.

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**TOUCHDOWN® Herbicide**

**NONSELECTIVE FOLIAR SYSTEMIC HERBICIDE FOR WEED CONTROL  
IN NONCROP AREAS AROUND THE FARM AND IN NONBEARING TREES AND VINES**

**ACTIVE INGREDIENT:**

Trimethylsulfonium carboxymethylaminomethylphosphonate\* . . . . . 57.6%

**INERT INGREDIENTS:** . . . . . 42.4%

**Total** . . . . . 100.0%

Contains 6 pounds active ingredient per gallon.

\*Sulfosate

EPA Reg. No. 10182-324  
EPA Est. No.:

Net Contents:

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**See Side Panel for Statement of Practical Treatment and Precautionary Statements**

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19897

ACCEPTED  
with COMMENTS  
In EPA Letter Dated

FEB 18 1994

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

10182-324

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## STATEMENT OF PRACTICAL TREATMENT

If a known exposure occurs or is suspected, immediately initiate the recommended procedures below. If further treatment is required, contact a POISON CONTROL CENTER, a physician, or the nearest hospital.

**IF SWALLOWED:** Immediately give several glasses of water and induce vomiting by gagging the victim with a finger placed on the back of the victim's tongue. Give fluids until vomitus is clear. Do not induce vomiting or give anything by mouth if victim is unconscious or convulsing.

**IF ON SKIN:** Flush with plenty of water for at least 15 minutes. ~~Remove contaminated clothing and shoes. Get medical attention if skin irritation occurs. Wash clothing before re-use.~~

**IF IN EYES:** Hold eyelids apart and flush eyes with large amounts of running water for at least 15 minutes. Get medical attention if irritation persists.

**IF INHALED:** Remove to fresh air. Seek medical attention if respiratory irritation occurs or if breathing becomes difficult.

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**FOR 24-HOUR EMERGENCY MEDICAL ASSISTANCE, CALL 1-800-F-A-S-T-M-E-D (327-8633).**

**FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.**

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## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

#### CAUTION

HARMFUL IF SWALLOWED, ABSORBED THROUGH THE SKIN, OR INHALED. PROLONGED CONTACT MAY CAUSE SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTIONS. Avoid contact with skin, eyes, or clothing. ~~Wear rubber gloves when handling. Avoid breathing spray mist. Wash thoroughly with soap and water after handling and before eating or smoking. Remove contaminated clothing and wash before reuse.~~

#### Personal Protective Equipment

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants.
- Waterproof gloves.
- Shoes plus socks.

**BEST AVAILABLE COPY**

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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### **User Safety Recommendations**

#### **Users should:**

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
  - Remove clothing 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**

Keep out of lakes, ponds and streams. 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.

In case of spill, ISOLATE the spill. Absorb spill with inert absorbent material such as clay or Fuller's earth. Sweep up used absorbent and place in an appropriate chemical waste container. Flush spill area with water. Observe all local, State and Federal laws and regulations regarding disposal, spill, cleanup, removal or discharge.

### **OTHER PRECAUTIONS**

Caution must be taken when applying TOUCHDOWN® nonselective foliar systemic herbicide to avoid drift or contact with nontarget plant species. Such contact may result in plant injury.

TOUCHDOWN should not be mixed or stored in galvanized steel or unlined steel containers. Stainless steel, plastic-lined steel, plastic or fiberglass containers are acceptable for mixing and storing TOUCHDOWN.

### DIRECTIONS FOR USE

It is a violation of Federal law to use this product (without complying with all label directions and warnings.)

*wrong left*

- Apply this product only as specified on the label.
- Do not apply by aircraft.
- Do not apply this product through any type of irrigation system.

Refer to attached booklet for complete directions for use.

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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protection equipment (PPE). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Waterproof gloves.
- Shoes plus socks.

**BEST AVAILABLE COPY**

### GENERAL INFORMATION

TOUCHDOWN is a nonselective foliar systemic herbicide used to control a broad spectrum of emerged weeds. TOUCHDOWN controls most grass and broadleaf weeds - both annual and perennial. TOUCHDOWN may be used in certain noncrop areas around the farm and in nonbearing groves, orchards, or vineyards up to 1 year of harvest to control unwanted vegetation.

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TOUCHDOWN is formulated as a liquid concentrate which contains 6 pounds of active ingredient per gallon.

TOUCHDOWN requires a 6-hour rain-free period after application. Rain occurring within 6 hours of application may reduce weed control.

### **STORAGE AND DISPOSAL**

**PROHIBITIONS:** Do not contaminate water, food, feed, fertilizer, or seeds by storage or disposal.

**STORAGE:** Keep container tightly closed when not in use.

**PESTICIDE DISPOSAL:** Rinse spray equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:**

**Plastic** - Triple rinse (or equivalent); then offer for recycling or reconditioning, or 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** - Triple rinse (or equivalent); then offer for recycling or reconditioning, or disposal in a sanitary landfill, or by other approved State and local procedures.

**IMPORTANT:** Read the entire Directions for Use and the Conditions of Sale and Warranty before using this product.

**CONDITIONS OF SALE AND LIMITED WARRANTY:**

The Directions for Use of this product are believed to be reliable and should be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as timing and method of application, weather and crop conditions, mixture with other chemicals not specifically recommended or other influencing factors in the use of the product, all of which are beyond the control of the seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Seller harmless for any claims relating to such factors.

Seller warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label, subject to the inherent risks referred to above, when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal conditions or under conditions not reasonably foreseeable to or beyond the control of Seller and Buyer and User assume the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES EXPRESSED OR IMPLIED INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY.

When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

This product is sold only for uses stated on its label. No express or implied license is granted to use or sell this product under any patent in any country except as specified. Country: United States of America. U.S. Patent No. 4,315,765.

TOUCHDOWN® is a trademarks of a ZENECA Group Company.

**TOUCHDOWN® Herbicide**

**NONSELECTIVE FOLIAR SYSTEMIC HERBICIDE FOR WEED CONTROL  
IN NONCROP AREAS AROUND THE FARM AND IN NONBEARING TREES AND VINES**

**COMPLETE DIRECTIONS FOR USE**

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When Buyer or User claims losses or damages resulting from the use or handling of this product (including claims based on contract, negligence, strict liability or other legal theories), Buyer or User must promptly notify in writing Seller of any claims to be eligible to receive either of the remedies set forth below. The EXCLUSIVE REMEDY OF BUYER OR USER and the LIMIT OF LIABILITY of Seller will be, at the election of Seller, refund of the purchase price paid for product bought, or replacement of amount of product used. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

Made in U.S.A.  
ZENECA Ag Products  
ZENECA Inc.  
Wilmington, DE 19897

ACCEPTED  
with COMMENTS  
In EPA Letter Dated  
FEB 1, 1994

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
as amended for the pesticide  
reg. order EPA Reg. No.  
10182-324

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**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**ACTIVE INGREDIENT:**

Trimethylsulfonium carboxymethylaminomethylphosphonate\* ..... 57.6%

**INERT INGREDIENTS:** ..... 42.4%

**Total** ..... 100.0%

Contains 6 pounds active ingredient per gallon.

\*Sulfosate

EPA Reg. No. 10182-324

**STATEMENT OF PRACTICAL TREATMENT**

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## PRECAUTIONARY STATEMENTS

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#### ENVIRONMENTAL HAZARDS

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**BEST AVAILABLE COPY**

## **OTHER PRECAUTIONS**

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TOUCHDOWN should not be mixed or stored in galvanized steel or unlined steel containers. Stainless steel, plastic-lined steel, plastic or fiberglass containers are acceptable for mixing and storing TOUCHDOWN.

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### DIRECTIONS FOR USE

It is a violation of Federal law to use this product (without complying with all label directions and warnings.) *incorrect text*

- Apply this product only as specified on the label.
- Do not apply by aircraft.
- Do not apply this product through any type of irrigation system.

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 requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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- Shoes plus socks.

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### GENERAL INFORMATION

TOUCHDOWN is a nonselective foliar systemic herbicide used to control a broad spectrum of emerged weeds. TOUCHDOWN controls most grass and broadleaf weeds - both annual and perennial. TOUCHDOWN may be used in certain noncrop areas around the farm and in nonbearing groves, orchards, or vineyards up to 1 year of harvest to control unwanted vegetation.

TOUCHDOWN is formulated as a liquid concentrate which contains 6 pounds of active ingredient per gallon.

**BEST AVAILABLE COPY**

TOUCHDOWN requires a 6-hour rain-free period after application. Rain occurring within 6 hours of application may reduce weed control.

## **APPLICATION DIRECTIONS**

### **Timing**

TOUCHDOWN should be applied to actively growing emerged weeds when they are small. Weeds 6 inches in height are the easiest to control. Larger weeds may be more difficult to control. The exception to this is johnsongrass or bermudagrass. These grasses should be allowed to reach the seedhead stage before application.

When weeds have been mowed, thus removing much of the green foliage, wait for 3-4 inches of new growth to appear before making an application of TOUCHDOWN.

### **Rates**

Follow recommended rates for TOUCHDOWN listed in the **WEEDS CONTROLLED** section. Use the higher label rates when weeds are dense or large. Also, use higher application volumes and pressures when weed vegetation is dense.

### **Tankmixes**

When perennial broadleaf weeds such as Canada thistle, field bindweed, or difficult to control annual broadleaf weeds such as common ragweed or morningglory spp. are present, tankmixes with 2,4-D or Banvel® herbicide, where labeled, will help improve control. In general, labeled TOUCHDOWN tankmixes with other products should be mixed as follows:

1. Fill spray tank 1/2 full with clean water.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Add dry formulations (WP, DF, etc.) to tank.
4. Add liquid formulations (SC, EC, L, etc.) to tank.
5. Add TOUCHDOWN and nonionic surfactant to tank.
6. Fill remainder of spray tank.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here.

## **SPRAY ADDITIVES**

### **Surfactants/Wetting Agents**

A surfactant or wetting agent (approved for use on growing crops) IS REQUIRED with TOUCHDOWN to improve coverage of weed foliage. All surfactants or wetting agents should contain at least 50% active ingredient. The concentration of active ingredient in a particular surfactant will determine how much should be added to the tank. Refer to table below for specific recommendations:

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Surfactant % Active Ingredient	Rate of Surfactant Per 1 Gallon of Water	Rate of Surfactant Per 100 Gallons of Water
75% or greater	3/4 fl oz	2 quarts*
50-74%	1-1/2 fl oz	4 quarts
Less than 50%	DO NOT USE	DO NOT USE

\*2 quarts = 0.5% V/V

#### Ammonium Sulfate

Control of annual and perennial weeds with TOUCHDOWN may be improved by adding dry ammonium sulfate 2% by weight or 17 pounds per 100 gallons water in addition to nonionic surfactant. The addition of ammonium sulfate will generally improve control under conditions of adverse environmental stress. Do not reduce use rates of TOUCHDOWN or nonionic surfactant when using ammonium sulfate.

### APPLICATION EQUIPMENT & TECHNIQUES

#### Broadcast Application

Apply TOUCHDOWN to actively growing weeds at the broadcast rates indicated in the **WEEDS CONTROLLED** section. Applications should be made in 10 to 30 gallons of water per acre with conventional spray equipment, or in 3 to 10 gallons per acre with low volume equipment. Increase volumes if weed foliage is dense.

The use of flat-fan nozzles will result in the most effective application of TOUCHDOWN. Flat fans should be used at 30 to 50 psi. Flood nozzles are generally not as good as flat fans since they produce large uneven droplets. The use of flood nozzles may result in reduced weed control due to inadequate coverage.

#### Spot Treatments

For control of the weeds listed, use a 0.25% solution of TOUCHDOWN plus nonionic surfactant in water to weeds less than 6 inches in height or runner length. For annual weeds over 6 inches, use a 0.5% to 1% solution. For best results, use a 1.5% to 2% solution on harder-to-control perennials such as hemp dogbane, field bindweed, dock, bermudagrass, milkweed, and Canada thistle. Refer to the **WEEDS CONTROLLED** section for a list of hard to control weeds (Tables 4 and 5). Use a 3% solution when using motorized spot spray equipment (rider bar). Spray the solution on actively growing foliage until uniformly wet but not to the point of runoff. Retreat 14-21 days later if regrowth occurs.

Prepare the desired volume of spray solution by mixing the amount of this product in water as shown in the following table:

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## Spot Spray Recommendations

### Amount of TOUCHDOWN Herbicide for Hand-Directed Spot Spray\*

Solution Strength	To Make This Volume				
	1 gallon	2 gallons	10 gallons	25 gallons	100 gallons
0.25%	1/3 fl oz	2/3 fl oz	3-1/3 fl oz	8 fl oz	2 pints
0.5%	2/3 fl oz	1-1/3 fl oz	6-2/3 fl oz	1 pint	4 pints
1%	1-1/3 fl oz	2-1/2 fl oz	12-1/2 fl oz	2 pints	1 gallon
1.5%	2 fl oz	4 fl oz	19-1/3 fl oz	3 pints	1-1/2 gallons
2%	2-2/3 fl oz	5-1/3 fl oz	1-1/2 pints	4 pints	2 gallons
3%	4 fl oz	8 fl oz	2-1/2 pints	8 pints	3 gallons
5%	6-1/2 fl oz	13 fl oz	4 pints	10 pints	5 gallons

\*See **SPRAY ADDITIVES** directions for surfactants and amounts which can be used.

1/3 fl. oz. = 2 teaspoons  
1/2 fl. oz. = 1 tablespoon  
1 fl. oz. = 2 tablespoons

8 fl. oz. or 1/2 pint = 1 cup  
16 fl. oz. = 1 pint  
1 gallon = 8 pints

### Wiper Applications

TOUCHDOWN may be applied using a wiper or "wick" applicator for selective control or suppression of annual and perennial weeds which become taller than the crop or desirable vegetation. To prevent injury to the crop or desirable vegetation, precautions should be taken to avoid contact with these plants. Equipment should be operated at speeds of 5 mph or less. Use slower speeds where weeds are dense. For improved control, make two applications in opposite directions.

### Mixing Directions

Mix 2 quarts of TOUCHDOWN in 2 gallons of water. Apply this mixture to target weeds, while avoiding contact with desirable vegetation.

### GENERAL USE PRECAUTIONS

- TOUCHDOWN requires actively growing green plant tissue to function. Application to drought-stressed weeds or weeds with little green foliage (i.e., mowed or cut weeds), may result in reduced weed control.
- DO NOT spray if conditions of thermal inversion exist, or if wind direction and speed may cause spray to drift onto adjacent areas. Drift minimization is the responsibility of the applicator. Consult with local and State agricultural authorities for information regarding avoiding or minimizing spray drift.
- Do not tank mix TOUCHDOWN with other pesticides or any other additives except as specified on this label or other supplemental labeling.

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- Do not apply TOUCHDOWN if rain is expected within 6 hours.
- Thoroughly clean spray tank after each use.

#### **CONSERVATION COMPLIANCE OR FEDERAL SET-ASIDE PROGRAMS**

(For use in compliance with the Federal Conservation Compliance or Federal set-aside programs)

- Apply to annual and perennial grass and broadleaf weeds according to the **WEEDS CONTROLLED** section of this label.
- TOUCHDOWN may be tank mixed with other herbicides registered for this use.

#### **FARMSTEAD (NONCROP)**

- Applications can be made in noncrop areas around the farm such as:

Farmyards	Rights-of-way
Soil Bank Land	Barrier Strips
Farm Buildings	Equipment Areas
Fuel Storage Areas	Fence Rows

- Apply to annual and perennial grass and broadleaf weeds according to the **WEEDS CONTROLLED** section of this label.
- Avoid contact with the foliage of ornamentals or other desirable plants.
- Repeat applications may be necessary.
- Do not make more than one application or exceed a total of 4 pounds (5.3 pints) of TOUCHDOWN per acre per year.

## NONBEARING CROPS

### GENERAL INFORMATION

TOUCHDOWN can be used to control annual and perennial weeds in nonbearing groves, orchards, or vineyards. Use TOUCHDOWN during site preparation prior to planting and up to 1 year of harvest. TOUCHDOWN is recommended on the following nonbearing crops:

Acerola (West Indian Cherry)	Huckleberry
Almonds	Jojoba
Apple	Kiwi
Apricots	Lemons
Artichokes	Limes
Asparagus	Loganberry
Avocados	Macadamia
Bananas	Mango
Blackberry	Nectarines
Blueberry	Olives
Boysenberry	Oranges
Cherries	Papayas
Coffee	Passion Fruit
Crabapple	Peaches
Cranberry	Pears
Dates	Pecans
Dewberry	Persimmons
Elderberry	Pistachios
Figs	Plantains
Filberts	Plums
Ginseng	Pomegranates
Gooseberry	Prunes
Grapes	Raspberry
Grapefruit	Tangelos
Guava	Tangerines
	Walnuts

### GENERAL USE PRECAUTIONS FOR NONBEARING CROPS

Do not apply more than 5-1/3 pints of TOUCHDOWN per acre per year.

Do not allow the spray, spray drift, or mist to contact green foliage or green bark on the trunk, suckers, open wounds, or other green parts of trees and vines. Contact with any tree or vine part other than mature brown woody bark may cause crop injury.

Avoid contact with stumps as injury to adjacent trees may occur from root grafting.

If annual or perennial weeds have been mowed or grazed, wait for 3 to 4 inches of new growth to appear before making an application of TOUCHDOWN. See the **WEEDS CONTROLLED** section for specific rates of application.

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## **APPLICATION DIRECTIONS FOR NONBEARING CROPS**

Applications may be made with boom equipment, CDA, shielded sprayers, hand-held and high-volume wands, lances, orchard sprayers, or with wiper application equipment. See the **APPLICATION DIRECTIONS** section of this label for specific information on use of equipment, carriers, and nozzles.

Multiple applications may be necessary to control certain perennial weeds, and weeds originating from underground parts (rhizomes, stolons, tubers) that are initially untreated. TOUCHDOWN does not provide residual weed control, and as such, weeds emerging after application will not be controlled. For residual weed control, tank mix TOUCHDOWN with residual herbicides as prescribed in the **TANK MIXTURES FOR NONBEARING CROPS** section, or make multiple applications.

## **TANK MIXTURES FOR NONBEARING CROPS**

TOUCHDOWN can be tank mixed with the following herbicides for control or suppression of emerged annual and perennial weeds. The following residual herbicides provide preemergence control of weeds listed on the individual product labels.

TOUCHDOWN plus:

- \* DEVRINOL® 50DF herbicide
- \* Direx® 4L herbicide
- \* Goal® 1.6E herbicide
- \* Karmex® WP herbicide
- \* Krovar® I herbicide
- \* Krovar II
- \* Prowl® herbicide
- \* Prowl® 3.3 EC herbicide
- \* Simazine/Caliber® 90 herbicide
- \* Simazine (80W, 4L, or Caliber 90) plus Surflan® herbicide (AS or 75W)
- \* Simazine 4L
- \* Simazine 80W
- \* Sim-Trol® 4L
- \* Surflan AS
- \* Surflan 75W
- \* Goal 1.6E plus Surflan (AS or 75W)
- \* Goal 1.6E plus Simazine (80W, 4L, or Caliber 90)
- \* Goal 1.6E plus Surflan (AS or 75W) plus Simazine (80W, 4L, or Caliber 90)

Following are rates for the residual herbicides:

PRODUCT	RATE/ACRE
DEVIRINOL 50DF	8 lbs.
Direx 4L	1 to 2½ qts.
Goal 1.6E	1.25 to 5 qts.
Karmex WP	2 to 8 lbs.
Krovar I	2 to 8 lbs.
Krovar II	2 to 8 lbs.
Prowl	2 to 4 qts.
Prowl 3.3 EC	2.4 to 4.8 qts.
Simazine, Caliber 90	1.1 to 10.6 lbs.
Simazine 80W	1-1/4 to 12 lbs.
Simazine 4L	2 to 9.6 qts.
Sim-Trol 4L	1 to 4 qts.
Surflan AS	2 to 4 qts.
Surflan 75W	2-2/3 to 5-1/3 lbs.

Refer to the individual product labels for precautionary statements, restrictions, and a list of weeds controlled.

**For control of emerged weeds in a tankmix:**

- Use TOUCHDOWN at 1-1/3 pints (21 fl.oz.) for the control of annual weeds that are less than 12 inches tall. When annual weeds are taller than 12 inches use 2 pints (32 fl.oz.) of TOUCHDOWN herbicide.
- Use TOUCHDOWN at 2-2/3 pints (42 fl.oz.) to 5-1/3 pints (85 fl.oz.) for suppression of perennial weeds. Perennial weeds may require multiple applications for control.
- Add an agriculturally approved nonionic surfactant when tank mixing TOUCHDOWN with residual herbicides. See the **SPRAY ADDITIVES** section of this label for recommendations.

**PERENNIAL GRASS SUPPRESSION IN ORCHARD FLOORS**

**BAHIAGRASS**

TOUCHDOWN can be used to inhibit seedhead emergence and suppress vegetative growth for approximately 40 to 50 days with a single application. By using a sequential application, suppression of vegetative growth and inhibition of seedhead emergence can be extended to 120 days. Applications must be made prior to seedhead emergence. Apply TOUCHDOWN at

20 to 30 days after complete green-up or after mowing to 4 inches tall. When a single application is planned, use 4 fluid ounces of TOUCHDOWN per acre plus 0.5% to 1.0% v/v nonionic surfactant in 10 to 25 gallons of water. When a sequential application is planned, use 3 fluid ounces per acre for the first application followed by another application of 3 fluid ounces per acre 40 to 50 days later.

### **BERMUDAGRASS**

#### **For Suppression Only:**

##### **1. East of the Rocky Mountains**

Apply 4 to 10 fluid ounces of TOUCHDOWN plus 0.5% to 1.0% v/v nonionic surfactant in 3 to 20 gallons of water per acre. Make the application 2 weeks after complete green-up or after 3 to 4 inches of regrowth following mowing. Use 4 to 6-1/2 fluid ounces per acre if a lesser degree of suppression is desired. A sequential application can be used when regrowth occurs if bermudagrass injury and stand reduction can be tolerated.

##### **2. West of the Rocky Mountains**

Apply 10 fluid ounces of TOUCHDOWN plus 0.5% to 1.0% v/v nonionic surfactant per acre in 3 to 10 gallons of water per acre. Make the application 2 weeks after complete green-up or after 3 to 4 inches of regrowth following mowing. A sequential application can be used when regrowth occurs if bermudagrass injury and stand reduction can be tolerated.

#### **Partial Control and Burndown:**

TOUCHDOWN can be used for burndown and partial control of bermudagrass at 1-1/3 pints (21 fl.oz.) to 2-2/3 pints (42 fl.oz.) plus 0.5% to 1.0% v/v nonionic surfactant in 3 to 20 gallons of water per acre. Use 1-1/3 pints east of the Rocky Mountains and 2-2/3 pints west of the Rocky Mountains.

Use this treatment only if reduction of the bermudagrass stand can be tolerated. Allow at least 21 days for complete burndown.

### **COOL SEASON GRASS COVERS**

For suppression of orchardgrass, fine fescue, tall fescue, and quackgrass apply 5 fluid ounces of TOUCHDOWN. Add a nonionic surfactant at 0.5% to 1.0% v/v in 10 to 20 gallons of water. Add ammonium sulfate at 2% by weight or 17 pounds per 100 gallons of spray mix. For suppression of Kentucky bluegrass, use 4 fluid ounces of TOUCHDOWN plus 0.5% to 1.0% v/v nonionic surfactant. Do not add ammonium sulfate for suppression of Kentucky bluegrass.

### **LOW VOLUME APPLICATION (FLORIDA AND TEXAS ONLY)**

To control or suppress the perennial weeds listed in the following table, apply the recommended rate of TOUCHDOWN plus 0.5% to 1.0% v/v nonionic surfactant in 3 to 20

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gallons of water per acre. Use higher gallonage if weed foliage is dense. Apply when the weeds have 3 to 4 inches of regrowth after mowing and are actively growing.

### USES FOR TOUCHDOWN IN LOW VOLUME APPLICATIONS IN FLORIDA AND TEXAS ONLY

Weed Species	Rate of TOUCHDOWN (Pints per Acre)			
	1-1/3	2-2/3	4	5-1/3
Bermudagrass	B	NR	PC	C
Guineagrass	B	C	C	C
Texas and Florida Ridge	NR	B	C	C
Florida Flatwoods				
Paragrass	B	C	C	C
Torpedograss	S	NR	PC	C

S = Suppression      B = Burndown  
PC = Partial Control   C = Control  
NR = Not Recommended

### WEEDS CONTROLLED

All weeds listed below are controlled by spray and hand-directed spot applications of TOUCHDOWN. For spray application use the indicated rates. See DIRECTIONS FOR USE for mixing and application instructions.

**TABLE 1**

The following weeds are controlled by 1/2 to 1-1/3 pints (0.375 - 1.0 lbs ai) TOUCHDOWN per acre:

#### COMMON NAME

#### SCIENTIFIC NAME

Bluegrass, Annual  
Chickweed  
Cupgrass, Southwestern  
Foxtail, Giant  
Foxtail, Green  
Jimsonweed  
Kochia  
Oats, Wild  
Puncturevine  
Ryegrass, Italian (Annual)  
Signalgrass  
Sowthistle  
Spurge, Spotted  
Thistle, Russian  
Wheat, Volunteer  
Witchgrass

*Poa annua*  
*Stellaria media*  
*Eriochloa gracilis*  
*Setaria faberi*  
*Setaria viridis*  
*Datura stramonium*  
*Kochia scoparia*  
*Avena fatua*  
*Tribulus terrestris*  
*Lolium multiflorum*  
*Brachiaria* spp.  
*Sonchus* spp.  
*Euphorbia maculata*  
*Salsola kali*  
*Triticum* spp.  
*Panicum capillare*

**TABLE 2**

The following weeds are controlled by 1 to 2-1/4 pints (0.75 - 1.7 lbs ai) TOUCHDOWN per acre:

COMMON NAME	SCIENTIFIC NAME
Alfalfa, Volunteer	<i>Medicago sativa</i>
Barley, Little	<i>Hordeum pusillum</i>
Barnyardgrass	<i>Echinochloa crus-galli</i>
Com, Volunteer	<i>Zea mays</i>
Crabgrass, Large	<i>Digitaria sanguinalis</i>
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>
Goosegrass	<i>Eleusine indica</i>
Lambsquarters, Common	<i>Chenopodium album</i>
Mares tail (Horseweed)	<i>Conyza canadensis</i>
Mustard	<i>Brassica</i> spp.
Nightshade, Black	<i>Solanum nigrum</i>
Panic Grass	<i>Panicum</i> spp.
Pigweed, Redroot	<i>Amaranthus retroflexus</i>
Pineappleweed	<i>Matricaria matricarioides</i>
Quackgrass	<i>Agropyron repens</i>
Ryegrass, Perennial	<i>Lolium perenne</i>
Sicklepod	<i>Cassia obtusifolia</i>
Smartweed, Pennsylvania	<i>Polygonum pennsylvanicum</i>
Timothy	<i>Phleum pratense</i>

**TABLE 3**

The following weeds are controlled by 1-1/3 to 2-2/3 pints (1 - 2.0 lbs ai) TOUCHDOWN per acre:

COMMON NAME	SCIENTIFIC NAME
Brome, Downy	<i>Bromus tectorum</i>
Cocklebur	<i>Xanthium</i> spp.
Dogbane, Hemp	<i>Apocynum cannabinum</i>
Hophornbeam, Copperleaf	<i>Acalypha ostryaefolia</i>
Johnsongrass, Rhizome*	<i>Sorghum halepense</i>
Johnsongrass, Seedling	<i>Sorghum halepense</i>
Milkweed	<i>Asclepias</i> spp.
Purslane, Common	<i>Portulaca oleracea</i>
Radish, Wild	<i>Raphanus raphistrum</i>
Ragweed, Giant	<i>Ambrosia trifida</i>
Shepherd's-purse	<i>Capsella bursa-pastoris</i>

\*To control regrowth of rhizome johnsongrass, apply TOUCHDOWN at or near seedhead stage or later.

**TABLE 4**

The following weeds are controlled by 1.9 to 4 pints (1.4 - 3 lbs ai) TOUCHDOWN per acre:

COMMON NAME	SCIENTIFIC NAME
Momingglory	<i>Ipomea</i> spp.
Ragweed, Common	<i>Ambrosia artemisiifolia</i>
Sida, Prickly	<i>Sida spinosa</i>
Thistle, Canada	<i>Cirsium arvense</i>

**TABLE 5**

The following weeds are controlled by 2-3/4 to 5-1/3 pints (2.1 - 4 lbs ai) TOUCHDOWN per acre:

COMMON NAME	SCIENTIFIC NAME
Bermudagrass*	<i>Cynodon dactylon</i>
Bindweed, Field*	<i>Convolvulus arvensis</i>
Cogongrass	<i>Imperata cylindrica</i>
Fescue, Tall	<i>Fescue arundianacea</i>
Nutsedge, Yellow	<i>Cyperus esculentus</i>
Sesbania, Hemp	<i>Sesbania exaltata</i>
Velvetleaf	<i>Abutilon theophrasti</i>

\*To control regrowth of bermudagrass, apply TOUCHDOWN or near seedhead stage or later.

\*\*To control regrowth of field bindweed, apply TOUCHDOWN at or near flowering stage.

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## **STORAGE AND DISPOSAL DIRECTIONS**

**PROHIBITIONS:** Do not contaminate water, food, feed, fertilizer, or seeds by storage or disposal.

**STORAGE:** Keep container tightly closed when not in use.

**PESTICIDE DISPOSAL:** Rinse spray equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### **CONTAINER DISPOSAL:**

**Plastic** - Triple rinse (or equivalent); then offer for recycling or reconditioning, or 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** - Triple rinse (or equivalent); then offer for recycling or reconditioning, or disposal in a sanitary landfill, or by other approved State and local procedures.

## **FOR EZ HANDLER CONTAINERS**

**CONTAINER DISPOSAL:** Reseal container and offer for reconditioning, or triple rinse (or equivalent) and offer for recycling or reconditioning, or clean in accordance with manufacturer instructions.

### **CONTAINER PRECAUTIONS**

Before refilling, inspect thoroughly for damage such as cracks, punctures, bulges, dents, abrasions, and damaged or worn threads on closure devices.

**REFILL ONLY WITH TOUCHDOWN.** The contents of this container cannot be completely removed by cleaning. Refilling with materials other than TOUCHDOWN will result in contamination and may weaken container.

After filling and before transporting, check for leaks.

Do not refill or transport damaged or leaking container.

**CONTAINER IS NOT SAFE FOR FOOD, FEED, OR DRINKING WATER!**

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