

100-1121

3/15/2011

1 of 52



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Washington, D.C. 20460

OFFICE OF  
CHEMICAL SAFETY AND  
POLLUTION PREVENTION

MAR 15 2011

Pat Dinnen  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, NC 27419-8300

Subject: Notification per PR Notice 98-10 (remove expired patent number)  
Applications Dated March 3, 2011

Dear Ms. Dinnen:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the products listed below. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10. The labels submitted with the applications have been date-stamped "Notification" and will be placed in our records.


<u>EPA Reg. Number</u>	<u>Product Name</u>
/ 100-1121	Touchdown Pro Herbicide
100-1157	Touchdown CF Herbicide
100-1169	Touchdown Total
100-1182	Touchdown HiTech Herbicide
100-1212	Touchdown CT Herbicide
100-1293	Traxion GT
100-1355	Departure Herbicide

If you have any questions regarding this letter, please contact Mindy Ondish at (703) 605-0723 or at [ondish.mindy@epa.gov](mailto:ondish.mindy@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Kable Bo Davis", is written over a horizontal line.

Kable Bo Davis  
Product Manager 25  
Herbicide Branch  
Registration Division (7504P)

 <b>United States</b> <b>Environmental Protection Agency</b> Washington, DC 20460		<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number Notification
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Application for Pesticide - Section I		
1. Company/Product Number 100-1121	2. EPA Product Manager Jim Tompkins	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Touchdown Pro Herbicide	PM# 25	
5. Name and Address of Applicant (Include ZIP Code) Syngenta Crop Protection, LLC P. O. Box 18300 Greensboro, NC 27419  <input type="checkbox"/> Check if this is a new address		6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to:  EPA Reg. No. _____  Product Name _____

Section - II	
<input type="checkbox"/> Amendment - Explain below.  <input type="checkbox"/> Resubmission in response to Agency letter dated _____  <input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application.  <input type="checkbox"/> Other - Explain below.

NOTIFICATION

MAR 15 2011


**Explanation:** Use additional page(s) if necessary. (For Section I and Section II.)  
 This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

Remove expired patent numbers.

Section - III			
<b>1. Material This Product Will Be Packaged In:</b>			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Type of Container</b> <input type="checkbox"/> Metal <input checked="" type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
*Certification must be submitted If "Yes" Unit Packaging wgt.    No. per Container		If "Yes" Unit Packaging wgt.    No. per container	
<b>3. Location of Net Contents Information</b> <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		<b>4. Size(s) Retail Container</b> 2.5 gal., 10 gal., 15 gal., 30 gal., and bulk	
		<b>5. Location of Label Directions</b> <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
<b>6. Manner in Which Label is Affixed to Product</b> <input type="checkbox"/> Lithograph <input checked="" type="checkbox"/> Other <u>Pressure Sensitive</u> <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled			

Section - IV		
<b>1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</b>		
Name Pat Dinnen	Title Staff Label Group Leader	Telephone No. (Include Area Code) 836-632-2494
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		
2. Signature 	3. Title Staff Label Group Leader	
4. Typed Name Pat Dinnen	5. Date March 3, 2011	
6. Date Application Received (Stamped)  		

**Syngenta Crop Protection, Inc.**  
P.O. Box 18300  
Greensboro, NC 27419-8300  
[www.syngenta.com](http://www.syngenta.com)

**syngenta**

**FedEx**

June 15, 2010

Document Processing Desk  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900, One Potomac Yard  
2777 South Crystal Drive  
Arlington, VA 22202-4501

Attention: Mr. Jim Tompkins, PM 25

**SUBJECT: TOUCHDOWN® PRO HERBICIDE**  
**EPA REG. NO. 100-1121**  
**SUBMISSION OF FINAL PRINTED LABELING**

In accordance with the above subject letter, Syngenta Crop Protection, Inc. is submitting one copy of final printed labeling for Touchdown Pro Herbicide that reflects the labeling accepted in EPA's approval letter dated September 8, 2009. This approval is in response to a Notification for Pesticide Registration Notice (PRN) 2007-4. The Storage and Disposal section of the label has been highlighted to show the changes made by PRN 2007-4.

Also enclosed is EPA Form 8570-1 indicating submission of final printed labeling. If you have any questions, please contact me at 336-632-2494. Thank you.

Sincerely,

Pat Dinnen

Pat Dinnen  
Label Group Leader  
Regulatory Affairs

Enclosures

A collection of 20 small, stylized line drawings of various birds, including sparrows, finches, and songbirds, arranged in a grid-like fashion. The drawings are simple, using only outlines and minimal shading to represent the birds' forms and features like beaks and wings.

4052

Booklet  
(2.5 gal., 10/15 gal. Link Pak, 30 gal., Bulk)

Touchdown® Pro

Herbicide

IQ® Technology

Nonselective Foliar Systemic Herbicide for Weed Control

**NOTIFICATION**

**MAR 15 2011**

Active Ingredient:

\*Glyphosate: N-(phosphonomethyl) glycine ..... 28.3%

Other Ingredients: ..... 71.7%

Total: ..... 100.0%

\*Contains 3 pounds of glyphosate acid in each gallon, in the diammonium salt form.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use inside booklet.

EPA Reg. No. 100-1121

EPA Est. 100-LA-001 [2.5 and 15 gal. only]

2.5 gallons  
U.S. Standard Measure

30 gallons  
U.S. Standard Measure

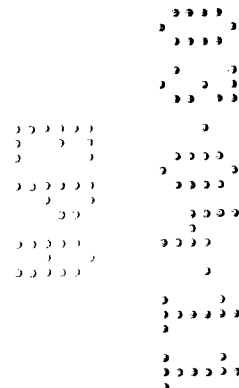
10 gallons  
U.S. Standard Measure

\_\_\_\_\_ gallons [Bulk]  
U.S. Standard Measure

15 gallons  
U.S. Standard Measure

SCP 1121A L1D 0909  
SCP 1121A L2C 0909  
SCP 1121A-L3C 0909

[2.5 gal., Product ID 31857]  
[10 gal. LinkPak, Product ID 30750]  
[15 gal. LinkPak, Product ID 15470]  
[30 gal., Product ID 29425]  
[Bulk, Product ID 31887]



FIRST AID	
If in eyes	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
If on skin or clothing	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control or doctor for treatment advice</li> </ul>
If swallowed	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
If inhaled	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p align="center"><b>HOT LINE NUMBER</b></p> <p align="center">For 24 Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call <b>1-800-888-8372</b></p>	

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

## HOT LINE NUMBER

For 24 Hour Medical Emergency Assistance (Human or Animal)  
Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident),  
Call  
**1-800-888-8372**

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**PRECAUTIONARY STATEMENTS**

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**Hazards to Humans and Domestic Animals****CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

**Personal Protective Equipment (PPE)**

**Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Socks and shoes

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, enclosed cabs, or aircraft 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.

**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**

Do not apply directly to water, or to areas where surface water is present (unless use is for aquatic weed control as described on this label), or to intertidal areas below the

mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

**CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA Crop Protection, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. 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 or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitation of Warranty and Liability, which may not be modified except by written agreement signed by a duly authorized representative of SYNGENTA.

## DIRECTIONS FOR USE

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

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.

### 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 protective equipment (PPE) and restricted-entry interval. 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
- Chemical-resistant gloves made of any waterproof material
- Shoes plus socks

### NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Keep people and pets off treated areas until spray solution has dried.



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**GENERAL INFORMATION**

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Touchdown Pro is a nonselective foliar systemic herbicide for control of a broad spectrum of emerged annual and perennial grass and broadleaf weeds and unwanted woody brush and trees.

Touchdown Pro is formulated as a liquid concentrate that contains 3 lbs. acid equivalent per gallon, in the diammonium salt form.

**Symptoms:** Touchdown Pro moves through the plant from the point of foliage contact to other areas of the plant including the root system. Visible effects will be seen on most annual weeds in 2-4 days and on most perennial weeds in 7 days or more. Extremely cool or cloudy weather following application may slow activity and delay development of visual symptoms. Effects are a gradual wilting and yellowing of the plant which becomes complete browning of above-ground growth and deterioration of underground plant parts.

**How It Works:** Touchdown Pro works by inhibiting an enzyme found only in plants.

**Cultural Considerations:** Application to annual or perennial weeds that have been mowed, grazed, or cut, and have not been allowed to regrow to the recommended stage for treatment may result in reduced control. Weeds covered with dust; weeds damaged by insects or disease may result in reduced weed control.

**Rainfastness:** Heavy rainfall or irrigation shortly after application may require retreatment.

**No Soil Activity:** Touchdown Pro does not provide soil residual control of weeds. Only emerged weeds at the time of application will be controlled. Weeds germinating from seed after application will not be controlled. Unemerged plants arising from unattached underground rhizomes or root stocks of perennials will not be affected.

**Note:**

- Apply this product only as specified on the label.
- Do not apply this product through any type of irrigation system.
- Do not apply this product by direct application (ground or air) to any body of water (unless use is for aquatic weed control as described on this label).
- Spray solutions of Touchdown Pro should be mixed, stored, and applied using only plastic, plastic-lined steel, stainless steel, aluminum, or fiberglass containers. Concentrate should not be stored in galvanized steel, carbon steel, aluminum, or unlined steel containers.

- It is recommended that the spray system be thoroughly cleaned with water and a commercial tank cleaner after each use.
- Reduced results may occur if water containing soil, such as visibly muddy water from ponds and ditches is used.
- The annual maximum rate is 10.6 qts. of Touchdown Pro per acre (10.0 qts./A for aquatic and forestry uses).
- Avoid contact of herbicide with foliage, green stems, exposed nonwoody roots of crops, desirable plants, and trees because severe injury or destruction is likely to result.
- Avoid drift. Caution must be taken when applying Touchdown Pro nonselective foliar systemic herbicide to avoid drift or contact with nontarget plant species. Such contact may result in plant injury. Spray drift is enhanced by application when winds are gusty, as wind speeds increase, when wind direction is constantly shifting, or when weather conditions promote drift. Spraying during those times should be avoided.
- Do not allow the herbicide solution to mist, drip, drift, or splash onto desirable vegetation since minute quantities of this product can cause severe damage or destruction to the crop, plants, or other areas on which treatment was not intended. When spraying, avoid combinations of pressure and nozzle type that will result in splatter or fine particles (mist) which are likely to drift. Avoid applying at excessive speed or pressure.

#### **TANK MIXES FOR RESIDUAL WEED CONTROL**

Refer to use sections for recommended tank mixes. Tank mixes of Touchdown Pro with other pesticides, fertilizers, or any other additives except as specified on this label or other approved Syngenta supplemental labeling may result in tank mix incompatibility or unsatisfactory performance. It is recommended that the compatibility of any tank mix combination be tested on a small scale such as a jar test before actual tank mixing.

Always refer to labels of other pesticide products for mixing directions and precautions which may differ from those outlined here. Use in accordance with the most restrictive of label limitations and precautions. No label dosage rates should be exceeded. This product cannot be mixed with any product containing a label prohibition against such mixing.

## ANNUAL WEED CONTROL

Use Touchdown Pro at 2 pts./A if weeds are less than 6 inches in height or runner length. Use 3-8 pts./A if weeds are greater than 6 inches in height or runner length or when weeds are growing under stress.

For spray-to-wet applications, apply a 0.5% solution to weeds less than 6 inches in height or runner length. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds. For annual weeds greater than 6 inches tall, use a 1% solution.

When plants are growing under stressed conditions, or where infestations are dense, Touchdown Pro may be used at 5-10.6 qts./A or a 1-2% solution for spot spray clean-up. Use the higher rate for tough-to-control species or for weeds over 24 inches tall.

**Table 1: Annual Weeds Controlled**

The following weeds are controlled with 2 pts./A if weeds are less than 6 inches in height or runner length; **or** 3-8 pts./A if weeds are greater than 6 inches in height or runner length or when weeds are growing under stress.

Anoda, spurred	Fleabane, annual <sup>1</sup>	Ragweed, common <sup>1</sup>
Balsamapple <sup>2</sup>	Fleabane, flaxleaf	Ragweed, giant
Barley <sup>1</sup>	Fleabane, hairy ( <i>Conyza bonariensis</i> ) <sup>1</sup>	Red rice
Barnyardgrass <sup>1</sup>	Fleabane, rough <sup>1</sup>	Redweed
Bittercress <sup>1</sup>	Florida pusley	Russian thistle
Basia, livehook	Foxtail <sup>1</sup>	Rye <sup>1</sup>
Black nightshade <sup>1</sup>	Goatgrass, jointed <sup>1</sup>	Ryegrass <sup>1</sup>
Bluegrass, annual <sup>1</sup>	Goosefoot	Sandbur, field <sup>1</sup>
Bluegrass, bulbous <sup>1</sup>	Goosegrass, nettleleaf	Shattercane <sup>1</sup>
Brassica, fivehook	Grain sorghum (milo) <sup>1</sup>	Shepherdspurse <sup>1</sup>
Brome, downy <sup>1</sup>	Groundcherry <sup>1</sup>	Sicklepod
Brome, Japanese <sup>1</sup>	Groundsel, common <sup>1</sup>	Signalgrass, broadleaf <sup>1</sup>
Browntop panicum <sup>1</sup>	Hemp sesbania	Smartweed, ladysthumb <sup>1</sup>
Buffalobur <sup>1</sup>	Henbit	Smartweed, Pennsylvania <sup>1</sup>
Buttercup <sup>1</sup>	Horseweed/Marestail ( <i>Conyza canadensis</i> )	Sowthistle, annual
Carolina foxtail <sup>1</sup>	Itchgrass <sup>1</sup>	Spanishneedles
Carolina geranium	Johnsongrass, seedling	Speedwell, purslane <sup>1</sup>
Cheat <sup>1</sup>	Junglerice	Sprangletop <sup>1</sup>
Cheatgrass	Knotweed	Spurge, annual
Chervil <sup>1</sup>	Kochia	Spurge, prostrate <sup>1</sup>
Cheeseweed	Lambsquarters <sup>1</sup>	Spurge, spotted <sup>1</sup>
Chickweed <sup>1</sup>	Little barley <sup>1</sup>	Spurry, umbrella <sup>1</sup>
Cocklebur <sup>1</sup>	London rocket <sup>1</sup>	Starthistle, yellow

Coffee senna	Mayweed	Stinkgrass <sup>1</sup>
Copperleaf, hophornbeam	Medusahead <sup>1</sup>	Sunflower <sup>1</sup>
Corn <sup>1</sup>	Morningglory ( <i>Ipomoea</i> spp.)	Teaweed/Prickly sida
Corn speedwell <sup>1</sup>	Mustard, blue <sup>1</sup>	Texas panicum <sup>1</sup>
Cowpea	Mustard, tansy <sup>1</sup>	Velvetleaf
Crabgrass <sup>1</sup>	Mustard, tumble <sup>1</sup>	Vetch, common
Croton, tropic	Mustard, wild <sup>1</sup>	Virginia copperleaf
Dwarf dandelion <sup>1</sup>	Oats	Virginia pepperweed <sup>1</sup>
Eastern mannagrass <sup>1</sup>	Panicum	Waterhemp <sup>1</sup>
Eclipta <sup>1</sup>	Pigweed <sup>1</sup>	Wheat <sup>1</sup>
Fall panicum <sup>1</sup>	Plains/Tickseed coreopsis <sup>1</sup>	Wild oats <sup>1</sup>
Falsedandelion <sup>1</sup>	Poinsettia, wild <sup>1</sup>	Witchgrass <sup>1</sup>
Falseflax, smallseed <sup>1</sup>	Prickly lettuce <sup>1</sup>	Woolly cupgrass <sup>1</sup>
Fiddleneck	Puncturevine	Yellow rocket
Field pennycress <sup>1</sup>	Purslane, common	
Filaree	Rabbitfootgrass	

<sup>1</sup>When using broadcast equipment (aerial or ground boom sprayers with flat fan nozzles) these species will be controlled or partially controlled with 1 pt./A. Applications must be made using a minimum of 3 gals. of carrier volume per acre. Use nozzles that ensure thorough coverage of foliage and treat when weeds are in an early growth stage.

<sup>2</sup>Apply to balsamapple with handheld equipment only.

## PERENNIAL WEED CONTROL

For best results, treat perennial weeds after they reach the reproductive stage of growth (seedhead initiation in grasses and bud formation in broadleaves). For nonflowering plants, best results are obtained when the plants reach a mature stage of growth. Treatment prior to these optimal growth stages reduces control. Under these conditions, use the higher application rate within the recommended range. Allow 7 or more days after application before tillage.

For spray-to-wet applications, ensure thorough coverage. In hand-held equipment for low volume directed spot treatments, apply a 5-10% solution of Touchdown Pro to the perennial weeds in the following table.

**Table 2: Perennial Weeds Controlled**

Weed	Rate (qts./A) <sup>1</sup>
Alfalfa	1-3
Alligatorweed <sup>2</sup>	3-5
Anise/Fennel	2-5
Bahiagrass	3-5

Weed	Rate (qts./A) <sup>1</sup>
Beachgrass, European	3-5
Bentgrass <sup>2</sup>	1-3
Bermudagrass	3-5
Bindweed, field	3-5
Bluegrass, Kentucky	1-3
Blueweed, Texas	3-5
Brackenfern	2-5
Bromegrass, smooth	1-3
Bursage, woolly-leaf <sup>1</sup>	2-5
Canarygrass, reed	1-3
Cattail	2-5
Clover, red and white	2-5
Cogongrass	2-5
Cordgrass	3-5
Cutgrass, giant	3-5
Dallisgrass	2-5
Dandelion	2-5
Dock, curly	2-5
Dogbane, hemp	3-5
Fescue (except tall)	2-5
Fescue, tall	1-3
German ivy	2-5
Guineagrass	2-5
Horsenettle	2-5
Horseradish	3-5
Iceplant	1-3
Jerusalem artichoke	2-5
Johnsongrass	1-3
Kikuyugrass	1-3
Knapweed	3-5
Lantana	2-5
Lespedeza	2-5
Loosestrife, purple	2-5
Lotus, American	2-5
Maidencane	2-5
Milkweed, common	2-5
Muhly, wirestem	1-3
Mullein, common	2-5
Napiergrass	2-5
Nightshade, silverleaf	1-5
Nutsedge, purple and yellow	2-5
Orchardgrass	1-3
Pampasgrass	2-5
Paragrass	2-5

Weed	Rate (qts./A) <sup>1</sup>
Pepperweed, perennial	3-5
Phragmites <sup>2</sup>	2-5
Poison hemlock	2-5
Quackgrass	1-3
Redvine <sup>2</sup>	1-3
Reed, giant	2-5
Ryegrass, perennial	1-3
Smartweed, swamp	2-5
Spatdock	3-5
Spurge, leafy <sup>2</sup>	2-5
Starthistle, yellow	3-5
Sweet potato, wild <sup>2</sup>	2-5
Thistle, artichoke	1-3
Thistle, Canada	1-3
Timothy	1-3
Torpedograss <sup>2</sup>	2-5
Trumpet creeper <sup>2</sup>	1-3
Tules, common	3-5
Vaseygrass	2-5
Velvetgrass	2-5
Waterhyacinth	3-5
Waterlettuce	2-5
Waterprimrose	1-3
Wheatgrass, western	1-3

<sup>1</sup> Or use a 2% solution for spot spray clean-up

<sup>2</sup>Partial control

## WOODY BRUSH AND TREE CONTROL

Apply Touchdown Pro after full leaf expansion, unless otherwise directed. Use the higher rate for larger plants and/or dense areas of growth. On vines, use the higher rate for plants that have reached the woody stage of growth. In most areas, best results are obtained when application is made in late summer or fall after fruit formation. Applications after some autumn color are acceptable as long as no major leaf drop has occurred. Reduced performance may result if fall treatments are made following a frost.

In arid areas, best results are obtained when applications are made in the spring to early summer when brush species are at high moisture content and are flowering.

Symptoms may not appear prior to frost or senescence with fall treatments.

If brush has been mowed or tilled, or trees have been cut, do not treat until regrowth has reached the recommended stage of growth. Allow 7 or more days after application

before tillage, mowing, or removal. Repeat treatments may be necessary to control plants regenerating from underground parts or seed.

For spray-to-wet applications, ensure thorough coverage. For spot spray and clean-up applications, use a 2-3% solution. In hand-held equipment for low volume directed spot treatments, apply a 5-10% solution of Touchdown Pro to the woody brush and trees in the following table.

**Table 3: Woody Brush and Trees Controlled**

Weed	Rate (qts./A) <sup>1</sup>
Alder	3-4
Ash <sup>2</sup>	2-5
Aspen, quaking	2-5
Bearmat (Bearclover) <sup>2</sup>	2-5
Beech <sup>2</sup>	2-5
Birch	1-2
Blackberry	3-4
Blackgum	2-5
Bracken	2-5
Broom, French and Scotch	2-5
Buckwheat, California <sup>2</sup>	2-5
Cascara <sup>2</sup>	5
Catsclaw <sup>2</sup>	5
Ceanothus <sup>2</sup>	2-5
Chamise <sup>2</sup>	2-5
Cherry, bitter, black and pine	1-5
Cottonwood, eastern	2-5
Coyote brush	2-5
Cypress, swamp and bald	2-5
Deerwood	2-5
Dewberry	3-4
Dogwood <sup>2</sup>	2-5
Elderberry	1-2
Elm <sup>2</sup>	2-5
Eucalyptus, bluegum	2-5
Florida holly (Brazilian peppertree) <sup>2</sup>	2-5
Gallberry	2-5
Gorse <sup>2</sup>	2-5
Hackberry, western	2-5
Hasardia <sup>2</sup>	2-5
Hawthorn	1-5
Hazel	1-2
Hickory <sup>2</sup>	2-5
Honeysuckle	3-4

Weed	Rate (qts./A) <sup>1</sup>
Hornbeam, American <sup>2</sup>	2-5
Huckleberry	2-5
Kudzu	4-5
Locust, black <sup>2</sup>	2-5
Madrone, resprouts <sup>2</sup>	5
Magnolia, sweetbay	2-5
Manzanita	2-5
Maple, red	2-5
Maple, sugar	5
Monkey flower <sup>2</sup>	2-5
Oak, black and white <sup>2</sup>	2-5
Oak, northern and pin	2-5
Oak, post	3-4
Oak, red	2-5
Oak, scrub <sup>2</sup>	2-5
Oak, southern red	1-5
Orange, osage	2-5
Persimmon <sup>2</sup>	2-5
Pine	2-5
Poison ivy	4-5
Poison oak	4-5
Poplar, yellow <sup>2</sup>	2-5
Prunus	2-5
Raspberry	3-4
Redbud, eastern	2-5
Redcedar, eastern	2-5
Rose, multiflora	1-2
Russian olive <sup>2</sup>	2-5
Sage brush, California	2-5
Sage, black	2-5
Sage, white <sup>2</sup>	2-5
Sago, black	2-5
Salmonberry	1-2
Saltbrush, Seamyrtle	2-5
Saltcedar <sup>2</sup>	2-5
Sassafras <sup>2</sup>	2-5
Sourwood <sup>2</sup>	2-5
Sumac (laurel <sup>2</sup> , poison, smooth, sugarbrush, and winged <sup>2</sup> )	2-5
Sweetgum	1-5
Swordfern <sup>2</sup>	2-5
Tallowtree, Chinese	5
Tan oak resprouts <sup>2</sup>	5
Thimbleberry	1-2



Weed	Rate (qts./A) <sup>1</sup>
Tobacco tree <sup>2</sup>	2-5
Toyon	2-5
Trumpet creeper	1-5
Vine maple <sup>2</sup>	2-5
Virginia creeper	2-5
Waxmyrtle, southern <sup>2</sup>	2-5
Willow	3-4
Yerbesenta, California	2-5

<sup>1</sup>Or use a 2% solution for spot spray clean-up

<sup>2</sup>Partial control

## APPLICATION PROCEDURES

- Apply these spray solutions in properly maintained and calibrated equipment capable of delivering desired volumes.
- Avoid drift. Do not apply in low level inversion conditions, when winds are gusty or under any other conditions which favor drift. Inversions are characterized by stable air and increasing temperatures with height above the ground. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer. Drift may cause damage to any vegetation contacted to which treatment is not intended.
- Drift control additives may be used with Touchdown Pro. Read and follow the manufacturer's directions for use.
- All equipment must be properly maintained and washed to remove product residues after use.

### Aerial Broadcast Equipment

Use the recommended rates of Touchdown Pro in 3-25 gals. of water per acre as a broadcast spray unless otherwise specified.

Spray should be released at the lowest height consistent with effective weed control and flight safety. Applications more than 10 ft. above the canopy should be avoided.

Use the largest droplet size consistent with good weed control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding inappropriate spray boom pressure. Solid stream or low shear nozzles may be utilized to reduce small droplet formation. These nozzles direct the fluid parallel to the existing airflow to reduce shear effects. Other techniques may include reducing the fan angle of flat fan nozzles if used,

or reducing the deflector plate angle if deflector type nozzles are used. Ensure the spray is released at an appropriate distance below the airfoil.

For best results, each specific aerial application vehicle used should be quantifiably pattern tested for aerial application of Touchdown Pro herbicide initially and every year thereafter.

Apply Touchdown Pro only by helicopter in forestry sites and utility rights-of-way.

Prolonged exposure of this product to uncoated steel surfaces may result in corrosion and possible failure of the part. Thoroughly wash aircraft after spraying to remove residues to prevent corrosion of exposed parts. Landing gear is most susceptible.

For aerial application in California refer to the Federal Supplemental Label for aerial application for specific instructions, restrictions, and requirements. For aerial application, consult with state or local authorities regarding any additional requirements for aerial treatments. Banvel® tank mixtures may not be applied by air in California.

Avoid direct application to any body of water unless use is for aquatic weed control as described on this label.

### **CDA Equipment**

The rate of Touchdown Pro applied per acre by controlled droplets application (CDA) equipment must not be less than the amount recommended in this label when applied by conventional broadcast equipment. For vehicle-mounted CDA equipment, apply 3-15 gals. of water per acre.

CDA equipment produces a spray pattern which is not easily visible. Extreme care must be exercised to avoid spray or drift contacting the foliage or any other green tissue of desirable vegetation.

### **Ground Broadcast Equipment**

Use the recommended rates of Touchdown Pro in 3-40 gals. of water per acre as a broadcast spray unless otherwise specified. As density of weeds increases, spray volume should be increased within the recommended range to ensure complete coverage. For best results with ground application equipment, use flat fan nozzles. Check for even distribution of spray droplets.

### **Hand-Held and High-Volume Equipment**

For applications made on a spray-to-wet basis, spray coverage should be uniform and complete. Do not spray to the point of runoff. Use coarse sprays only.

For control of weeds listed in Table 1 (**Annual Weeds Controlled**), apply a 0.5% solution of Touchdown Pro to weeds less than 6 inches in height or runner length. For annual weeds over 6 inches tall, or unless otherwise specified, use a 1% solution. Apply prior to seedhead formation in grass or bud formation in broadleaf weeds.

For harder-to-control perennials, such as bermudagrass, Canada thistle, dock, field bindweed, hemp dogbane, and milkweed, use a 2% solution.

For low volume directed spray applications, use a 5-10% solution of Touchdown Pro for control or partial control of annual weeds, perennial weeds, or woody brush and trees. Spray coverage should be uniform with at least 50 percent of the foliage contacted. When spraying large woody brush and trees with dense and thick foliage or multiple sprouts, spray both sides to ensure adequate coverage.

### **Injection Systems**

Touchdown Pro may be used in aerial or ground injection spray systems. It may be used as a liquid concentrate or diluted prior to injecting into the spray stream. Do not mix Touchdown Pro with the undiluted concentrate of other products when using injection systems unless specifically recommended.

### **Selective Equipment**

**AVOID CONTACT OF HERBICIDE WITH DESIRABLE VEGETATION.**

Touchdown Pro may be applied through recirculating spray systems, shielded applicators, hooded sprayers, wiper applicators, or sponge bars to listed weeds growing in any noncrop site specified on this label. A recirculating spray system directs the spray solution onto weeds growing above desirable vegetation. Spray solution not intercepted by weeds is collected and returned to the spray tank for reuse. Shielded or hooded sprayers direct the herbicide solution onto weeds, while shielding desirable vegetation from the herbicide.

Adjust selective applicators so that the lowest spray stream or wiper contact point is at least 2 inches above the desirable vegetation. Droplets, mist, foam, or splatter of the herbicide solution settling on desirable vegetation is likely to result in discoloration, stunting, or destruction.

Better results may be obtained when more of the weed is exposed to the herbicide solution. Weeds not contacted by the herbicide solution will not be affected. In dense clumps, severe infestations, or when the height of the weeds varies so that not all weeds are contacted, repeat treatment may be necessary.

### Shielded and Hooded Applicators

For shielded and hooded applicators, use nozzles that provide uniform coverage within the treated area. Keep shields on these sprayers adjusted to protect desirable vegetation.

### Wiper Applicators and Sponge Bars

Equipment must be designed, maintained, and operated to prevent the herbicide solution from contacting desirable vegetation. Apply at ground speeds of 5 mph or less. Use slower speeds where weeds are dense. For improved control, make 2 applications in opposite directions.

Do not use wiper equipment when weeds are wet.

Use the spray solution within 24 hrs. of mixing.

**For Rope or Sponge Wick Applicators:** Mix 1-2 gals. of Touchdown Pro in 2 gals. of water to prepare a 33-75 % solution. Apply this solution to weeds listed in this section.

**For Porous Plastic Applicators and Pressure Feed Systems:** Mix 1 gal. of Touchdown Pro in 2 gals. of water to prepare a 33% solution up to using the product undiluted as a 100% solution. Apply this solution to weeds listed in this section.

When applied as recommended, Touchdown Pro controls the following weeds:

Corn, volunteer	Sicklepod
Panicum, Texas	Spanishneedles
Rye, common	Starbur, bristly
Shattercane	

When applied as recommended, Touchdown Pro suppresses the following weeds:

Beggarweed, Florida	Milkweed	Sunflower
Bermudagrass	Nightshade, silverleaf	Thistle, Canada
Dogbane, hemp	Pigweed, redroot	Thistle, musk
Dogfennel	Ragweed, common	Vaseygrass
Guineagrass	Ragweed, giant	Velvetleaf
Johnsongrass	Smutgrass	

### SITE AND USE RECOMMENDATIONS

Unless otherwise specified, applications may be made to control any weeds listed in the annual, perennial, and woody brush tables (Table 1, 2, and 3). Refer to the **APPLICATION PROCEDURES** section for additional rate information.

## MIXING PROCEDURES

1. Fill the mixing or spray tank ½ 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 Pro.
6. Add nonionic surfactant/wetting agent (if used).
7. Fill remainder of spray tank.
8. Use appropriate practices to avoid siphoning back into the carrier source. If states or local authorities require them, use approved anti-back siphoning devices.

### Mixing for Hand-Held Sprayers

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

**Table 4: Mixing for Hand-Held Sprayers**

Spray Solution						
Amount of Touchdown Pro						
To Make This Volume	0.5%	1%	1.5%	2%	5%	10%
1 gal.	0.6 fl. oz.	1.3 fl. oz.	2 fl. oz.	2.6 fl. oz.	6.5 fl. oz.	13 fl. oz.
25 gals.	1 pt.	2 pts.	3 pts.	2 qts.	5 qts.	10 qts.
50 gals.	1 qt.	2 qts.	3 qts.	4 qts.	10 qts.	5 gals.
100 gals.	2 qts.	4 qts.	6 qts.	2 gals.	5 gals.	10 gals.

For use in knapsack sprayers, it is suggested that the recommended amount of Touchdown Pro be mixed with water in a large container. Fill sprayer with the mixed solution.

## SPRAY ADDITIVES

### Surfactants/Wetting Agents

A nonionic surfactant (NIS) or wetting agent (approved for use on growing crops) may be used at levels up to 0.25% v/v (1 qt. NIS or wetting agent/100 gals.) of finished spray

volumes, unless specified otherwise elsewhere on this label. All nonionic surfactants or wetting agents should contain at least 75% active ingredient.

### **Ammonium Sulfate (AMS)**

Control of annual and perennial weeds with Touchdown Pro may be improved by adding dry ammonium sulfate at 0.5% by weight or 4.25-17 lbs./100 gals. of water. Liquid formulations of AMS may be used at an equivalent rate. Do not reduce use rates of Touchdown Pro when using AMS.

### **Drift Control Agents**

Drift control agents may be used with Touchdown Pro.

### **Dyes/Colorants**

Dyes or colorants approved for agricultural use can be used in spray solutions of Touchdown Pro. Use according to manufacturer's direction. Addition of these dyes/colorants may reduce performance, especially at low dilution rates.

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## **SPECIFIC USE DIRECTIONS**

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### **GENERAL USE AREAS**

Use in areas such as airports; apartment complexes; aquatic areas; Christmas tree farms; ditch banks; ditches; canals; fencerows; forests; golf courses, habitat restoration and management areas; highways; industrial sites; lumber yards; manufacturing sites; natural areas; office complexes; ornamental nurseries; parks; parking areas; pasture and rangeland (including stock tanks, watering holes, and ponds); petroleum tank farms and pumping installations; pipeline, power, telephone and utility rights-of-way; railroads; recreational areas; residential areas (commercial applicators only); roadsides; schools; storage areas; utility substations; warehouse areas; wetlands; other public areas; and similar industrial and noncrop sites.

Follow the directions listed in the **SPRAY ADDITIVES** and **APPLICATION PROCEDURES** sections. Refer to the **WEEDS, WOODY BRUSH AND TREES CONTROLLED** sections for application rates.

The maximum use rates stated throughout this product's labeling apply to this product combined with the use of all other herbicides containing glyphosate or sulfosate as the active ingredient, whether applied as mixtures or separately. Calculate the application rates and ensure that the total use of this and other glyphosate or sulfosate containing products does not exceed maximum use rate.

### **TURFGRASS USES (INCLUDING ROADSIDES)**

Touchdown Pro may be used on turf in any areas described in **GENERAL USE AREAS.**

### **Chemical Mowing**

Touchdown Pro, at 6 oz. in 10-40 gals. of water per acre, will suppress Kentucky bluegrass and serve as a substitute for mowing.

Touchdown Pro, at 8 oz. (0.5 pts.) in 10-40 gals. of water per acre, will suppress fine fescue, orchardgrass, quackgrass, or tall fescue and serve as a substitute for mowing.

Touchdown Pro, at 4-5 oz. in 10-40 gals. of water per acre, will suppress some annual grasses such as ryegrass, wild barley, and wild oats growing in coarse turf on roadsides or other industrial areas. Make applications while the annual grasses are actively growing and before the seedheads reach the boot stage of development. Treatment may cause injury to the desired grasses.

### **Dormant Bermudagrass**

Touchdown Pro may be used to control or partially control many winter annual weeds and tall fescue for effective release in dormant bermudagrass. Treat only when turf is dormant and prior to spring greenup. Apply 0.5-4 pts. of Touchdown Pro in 10-40 gals. of water per acre to control winter annuals less than 6 inches in height and tall fescue at or beyond the 4-6 leaf stage.

### **Tank Mix with Oust® - Dormant Bermudagrass**

Touchdown Pro can be tank mixed with Oust for residual control. Apply 0.5-4 pts. of Touchdown Pro with 0.25-1 oz. of Oust per acre. Use where some temporary injury or discoloration to a desirable bermudagrass stand can be tolerated. Use a maximum of 1 oz. of Oust to minimize injury and avoid delays in greenup.

### **Actively Growing Bermudagrass**

Touchdown Pro may be used to control or partially control many annual and perennial weeds for effective release in actively growing, well established bermudagrass. Apply 1-3 pts. of Touchdown Pro in 10-40 gals. of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height or runner length. Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass	Johnsongrass
Bluestem, silver	Trumpet creeper
Fescue, tall	Vaseygrass

Use only on well established bermudagrass. Bermudagrass injury may occur but regrowth will occur under moist conditions. Repeat applications are not recommended in the same season.

### **Tank Mix with Oust – Actively Growing Bermudagrass**

Touchdown Pro can be tank mixed with Oust for residual control. Apply 1-2 pts. of Touchdown Pro with 1-2 oz. of Oust per acre. Use lower rates of both products when treating annual weeds below 6 inches in height or runner length. Use the higher rates of both products as weeds increase in size or as they approach flower or seedhead formation. These rates will also provide partial control of the following perennial species:

Bahiagrass	Dallisgrass	Fescue, tall	Trumpet creeper
Bluestem, silver	Dock, curly	Johnsongrass	Vaseygrass
Broomsedge	Dogfennel	Poor Joe	Vervain, blue

Use only on well established bermudagrass. Bermudagrass injury may occur but regrowth will occur under moist conditions. Repeat applications are not recommended in the same season.

### **Dormant Bahiagrass**

Touchdown Pro may be used to control or partially control many winter annual weeds and tall fescue for effective release of dormant bahiagrass. Treat only when turf is dormant and prior to spring greenup. Apply 0.5-4 pts. of Touchdown Pro in 10-40 gals. of water per acre to control winter annuals less than 6 inches in height and tall fescue at or beyond the 4-6 leaf stage.

### **Tank Mix with Oust - Dormant Bahiagrass**

Touchdown Pro can be tank mixed with Oust for residual control. Apply 0.5-4 pts. of Touchdown Pro with 0.25-0.5 oz. of Oust per acre. Use where some temporary injury or discoloration to a desirable bahiagrass stand can be tolerated.

### **Actively Growing Bahiagrass**

Touchdown Pro, at 6 oz. in 10-40 gals. of spray solution per acre, may be used to suppress vegetative growth and inhibit seedhead formation of actively growing bahiagrass for approximately 45 days. Make applications 1-2 weeks after green-up or after mowing to a height of 3-4 inches. Applications must be made before seedhead emergence. Suppression can be extended to 120 days with an application of Touchdown Pro at 4 oz., followed in 45 days with an application at 2-4 oz. Do not make more than 2 applications per year.



### **Tank Mix with Oust – Actively Growing Bahiagrass**

Touchdown Pro can be tank mixed with Oust for residual control. One to 2 weeks following an initial spring mowing, apply 6 oz. of Touchdown Pro with 0.25 oz. of Oust. Do not make more than one application per year.

### **Renovation; Seed or Sod Production**

Touchdown Pro may be used to renovate turf in any areas described in **GENERAL USE AREAS**.

Touchdown Pro controls most existing vegetation prior to renovating turfgrass areas or establishing turfgrass grown for seed or sod. For maximum control of existing vegetation, delay planting or sodding to determine if any regrowth from escaped underground plant parts occurs. Where repeat treatments are necessary, sufficient regrowth must be attained prior to application. For warm season grasses such as bermudagrass, summer or fall applications provide the best control where existing vegetation is growing under mowed turfgrass management. Apply Touchdown Pro after omitting at least one regular mowing to allow sufficient growth for good interception of the spray.

Do not disturb soil or underground plant parts before treatment. Tillage or renovation techniques such as vertical mowing, coring, or slicing should be delayed for 7 days after application to allow translocation into underground plant parts.

Desirable turfgrasses may be planted following the above procedures. Hand-held equipment may be used for spot treatment of unwanted vegetation growing in existing turfgrass. Broadcast or hand-held equipment may be used to control sod remnants or other unwanted vegetation after sod is harvested.

### **Note for Turfgrass Uses**

- Application of rates greater than 1 pt./A of Touchdown Pro may result in injury or delayed green-up in highly maintained areas, such as golf courses and lawns.
- Oust tank mixes should not be used in highly maintained turfgrass.
- Do not feed or graze turfgrass grown for seed or sod production for 8 weeks following application.
- Use only in areas where some temporary injury or discoloration of perennial grasses can be tolerated.

## PASTURE USES

Touchdown Pro can be used on pastures of the following type:

Alfalfa	Fescue
Bahiagrass	Orchardgrass
Bermudagrass	Ryegrass
Bluegrass	Timothy
Bromegrass	Wheatgrass
Clover	

**Method of Application:** Before, during, or after planting but before emergence; renovation; spot spray; and wiper/wick.

Follow directions listed in the **SPRAY ADDITIVES** and **APPLICATION PROCEDURES** sections. Refer to the **WEEDS, WOODY BRUSH AND TREES CONTROLLED** sections, for rates and timing.

For best results, remove domesticated livestock 14 days before treatment. Allow 2-6 inches of new growth prior to treatment.

To aid in renovation of pastures, Touchdown Pro may be applied at 10-64 oz./A to dormant pastures. Applications of Touchdown Pro to green, non-dormant plant tissue of desirable species will cause stunting, plant injury, or plant death.

### General Use Precautions for Pastures

- Remove domestic livestock and wait 8 weeks before grazing or harvesting for forage and hay following preplant, preemergence, or pasture renovation applications.
- If using spot or wiper/wick application, remove domestic livestock before application and wait 14 days before grazing or harvesting for forage or hay.

### Tank Mixtures for Pastures

Touchdown Pro can be tank mixed with the herbicides 2,4-D and/or Dicamba for control or suppression of annual and perennial weeds provided that the tank mix product label allows use of the product. Refer to the **WEEDS CONTROLLED** section for application rates and timing. Apply Touchdown Pro at 1-8 pts./A in these tank mixes for control or suppression of annual and perennial weeds. For control or suppression of dense populations of weeds greater than 12 inches in height or weeds under stress, consider use rates at the higher end of the rate range.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of weeds, woody brush, and trees controlled.

## **FORESTRY AND UTILITY RIGHT-OF-WAY USES**

Touchdown Pro is recommended for the control or partial control of woody brush, trees, annual, and perennial weeds in forestry and utility sites. Touchdown Pro is also recommended in preparing or establishing wildlife openings within these sites, for maintaining logging roads, and for side trimming along utility rights-of-way (including electrical power; pipeline and telephone rights-of-way; and utility sites such as substations).

Broadcast applications can be made at 2-10 qts./A in 5-30 gals./A by air; and 10-60 gals./A by ground.

Spray-to-wet applications can be made with a handgun, backpack, or mistblower applicator with a 0.75-2% spray solution. For low volume directed spray applications, use a 5-10% solution of Touchdown Pro. Handguns, backpack, or mistblower applicators can be used. For low volume directed spray applications, coverage should be uniform with at least 50 percent of the foliage contacted. Coverage of the top one-half of the plant is important for best results.

Use of 0.5-1% NIS is recommended. Mix 2-4 qts. of NIS per 100 gals. of spray solution.

Refer to the **WEEDS, WOODY BRUSH AND TREES CONTROLLED** sections for use rates. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Increase rates within the recommended range for control of perennial weeds any time after emergence and before seedheads, flowers, or berries appear.

Use the lower rates of Touchdown Pro within the recommended range for control of annual weeds and actively growing perennial weeds after seedheads, flowers, or berries appear.

## **Tank Mixtures for Use in Forestry Site Preparation and Utility Rights-of-Way**

Tank mixtures of Touchdown Pro may be used to increase the spectrum of vegetation controlled. Any recommended rate of Touchdown Pro may be used in a tank mix.

Arsenal®	Garlon™ 4
Chopper®	Oust
Escort®	Vanquish®
Garlon™ 3A	

- Only use Garlon 4 tank mixes or use Touchdown Pro alone at recommended rates in utility side trimming.

- Ensure that Garlon 3A is thoroughly mixed with water according to label directions before adding to tank mixture. Ensure adequate agitation at the time Garlon 3A is added to avoid spray compatibility problems.
- For forestry site preparation, make sure the tank mix product is approved for use prior to planting desired species.

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

### **Forestry Conifer and Hardwood Release – Directed Spray and Selective Equipment**

Touchdown Pro may be applied with selective equipment or as a directed spray for forestry conifer and hardwood release, including Christmas tree plantations and silvicultural nurseries. See the **APPLICATION PROCEDURES** section for recommended equipment.

Spray-to-wet applications can be made with a 2% spray solution for control of undesirable woody brush and trees. Use a 1-2% spray solution for most annual and perennial weeds. For low volume directed spray applications, use a 5-10% solution of Touchdown Pro. Handguns, backpack, or mistblower applicators can be used. Coverage should be uniform with at least 50 percent of the foliage contacted. Coverage of the top one-half of the plant is important for best results.

Equipment calibrated for broadcast applications can be used. Use 2-10 qts. of Touchdown Pro in 10-60 gals. of clean water per acre. Use shielded application equipment to avoid contact with foliage or green bark of desirable plants.

Use of 0.5-1.5% NIS is recommended. Mix 2-6 qts. of NIS per 100 gallons of spray solution.

Wiper application equipment may be used. Refer to the **Wiper Applicators and Sponge Bars** section for rate and use directions.

Refer to the **WEEDS, WOODY BRUSH AND TREES CONTROLLED** sections for use rates. For best results, apply to actively growing woody brush and trees after full leaf expansion and before fall color and leaf drop. Increase rates within the recommended range for control of perennial weeds any time after emergence and before seedheads, flowers, or berries appear.

Use the lower rates of Touchdown Pro within the recommended range for control of annual weeds and actively growing perennial weeds after seedheads, flowers, or berries appear.

### **Tank Mixtures for Use in Directed Spray and Selective Equipment**

Tank mixtures of Touchdown Pro may be used to increase the spectrum of vegetation controlled. Any recommended rate of Touchdown Pro may be used in a tank mix.

Arsenal  
Garlon 4  
Oust

- Only use Oust tank mixes or use Touchdown Pro alone at recommended rates in hardwood plantations.
- Only use Garlon 4 or Arsenal tank mixes or use Touchdown Pro alone at recommended rates in pine plantations.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of trees, woody brush, and weeds controlled.

### **Forestry Conifer Release – Broadcast Spray**

Use of 0.25-1% NIS is recommended. Mix 1-4 qts. of NIS per 100 gallons of spray solution.

**To avoid injury to desirable species, make sure final resting buds have formed and are well hardened off before fall application or prior to initial bud swelling in the spring.**

### **Outside Southeastern U.S.**

Touchdown Pro can be used as a broadcast spray for conifer forest release. Apply Touchdown Pro at 1-2 qts./A for species listed in the following table in areas outside the southeastern U.S., unless specified otherwise in the table.

**Table 5: Use for Release of the Following Conifer Species Outside the Southern U.S.**

Species	Scientific Name	Remarks
Douglas Fir	<i>Pseudotsuga menziesii</i>	Apply 1-1.5 qts./A at end of first growing season (except CA).
Fir	<i>Abies</i> spp.	---
Hemlock	<i>Tsuga</i> spp.	Do not add surfactant. Injury may result.
Pines	<i>Pinus</i> spp.	Not for use on loblolly, long leaf, short leaf, or slash pine. Apply 1-1.5 qts.A at end of first growing season (except CA).
Redwood, California	<i>Sequoia</i> spp.	Do not add surfactant. Injury may result.
Spruce	<i>Picea</i> spp.	In Michigan, Minnesota, and Wisconsin, up to 3 qts./A may be used for difficult to control woody brush and trees. In other areas, apply 1-1.5 qts./A at end of first growing season.

**Tank Mixtures for Broadcast Sprays Outside the Southeastern U.S.**

Tank mixtures of Touchdown Pro may be used to increase the spectrum of vegetation control.

**Arsenal Applicators Concentrate  
Oust**

- In Maine and New Hampshire, use 1 fl. oz./A of Arsenal Applicators Concentrate in a tank mix to control difficult species.
- For Douglas Fir release, use 2-6 fl. oz./A of Arsenal Applicators Concentrate in a tank mix with 1-1.5 qts./A of Touchdown Pro.
- For Douglas Fir release, NIS may be used at 2 fl. oz./A at elevations above 1500 feet or 1 fl. oz./A in the coastal ranges or at elevations below 1500 feet.
- For Balsam Fir and Red Spruce release, use 1-2.5 fl. oz./A of Arsenal Applicators Concentrate with 2 qts./A of Touchdown Pro.

- For Jack Pine and White Spruce release, use 1-3 oz./A of Oust in a tank mix with 1-2 qts./A of Touchdown Pro. For White Pine release, use 1-1.5 oz./A of Oust in a tank mix with 1-2 qts./A of Touchdown Pro. Over-the-top applications to established stands can be made. Make sure late summer or final fall resting buds have formed before application.

### Southeastern U.S.

**Table 6: Use for Release of the Following Conifer Species In the Southern U.S.**

Species	Scientific Name	Remarks
Eastern White Pine	<i>Pinus strobus</i>	<ul style="list-style-type: none"> <li>• Apply 1-1.5 qts./A during late summer or early fall on established stands.</li> <li>• Apply 1 qt./A at end of first growing season.</li> <li>• Make sure final fall resting buds have formed before application.</li> </ul>
Loblolly Pine	<i>Pinus taeda</i>	
Long-leaf Pine	<i>Pinus palustris</i>	
Short-leaf Pine	<i>Pinus echinata</i>	
Slash Pine	<i>Pinus elliottii</i>	
Virginia Pine	<i>Pinus virginiana</i>	

### Tank Mixtures for Broadcast Sprays in the Southeastern U.S.

A tank mix of Touchdown Pro may be used to increase the spectrum of vegetation control. Apply 1-2 qts./A of Touchdown Pro in a tank mix with Arsenal Applicators Concentrate at 2-16 fl. oz. Use the higher recommended rates for dense, tough-to-control, woody brush and trees.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of trees, woody brush, and weeds controlled.

### Forestry Conifer Release – Broadcast – Annual and Perennial Weed Control

Touchdown Pro is recommended for the control of annual weeds and control or suppression of perennial weeds listed in the **WEED CONTROL** sections (Table 1 and 2). Make applications to actively growing weeds as a broadcast spray over the top of labeled conifers. For best results, apply in a maximum of 25 gallons of clean water per acre.

### Tank Mixtures for Residual Annual and Perennial Weed Control in Conifer Forests

Touchdown Pro in a tank mix with the following residual herbicides can provide residual control of annual and perennial weeds.

Atrazine  
Oust

- For Loblolly Pine release, apply 16-24 fl. oz./A of Touchdown Pro in a tank mix with 2-4 oz./A of Oust.
- For Slash Pine release, apply 12-16 fl. oz./A of Touchdown Pro in a tank mix with 2-4 oz./A of Oust.
- These applications can be made to newly planted pines. For best results, apply after emergence of annual and perennial weeds in the spring or early summer. May and June applications are often the best.
- For Douglas Fir release, apply 1 qt./A of Touchdown Pro in a tank mix with 4 lbs. a.i./A. Do not add surfactant. Applications can only be made to Douglas firs established at least one full growing season. Apply in early spring (mid-March to early April) before bud swell. Injury will occur if applications are made after bud swell.

Refer to individual product labels for precautionary statements, restrictions, rates, approved uses, and a list of trees, woody brush, and weeds controlled.

**Note:** For all of the following use sites on this label, refer to Tables 1-4 for specific rates unless otherwise noted below.

## **OTHER NONCROP AREAS; INDUSTRIAL SITES; PARKS; RESIDENTIAL AND RECREATIONAL**

### **General**

Touchdown Pro may be used in general noncrop areas. It may be applied with any application equipment described in this label. Touchdown Pro may be used to trim-and-edge around objects in noncrop sites, for spot treatment of unwanted vegetation, and to eliminate unwanted weeds growing in established shrub beds or ornamental plantings. Touchdown Pro may be used prior to planting an area to ornamentals, flowers, turfgrass (sod or seed), or prior to laying asphalt or beginning construction projects.

### **Noncrop Areas and Industrial Sites**

Repeated applications of Touchdown Pro may be used, as weeds emerge, to maintain bare ground.

### **Tank Mixtures for Noncrop Areas and Industrial Sites**

Touchdown Pro can be tank mixed with the following herbicides for control of emerged annual weeds and control or partial control of perennial weeds, woody brush, and trees.



Arsenal	Karmex	Sahara®
Banvel	Krovar®	Simazine
Barricade®	Pendulum®	Surflan®
Diuron	Plateau®	Telar®
Endurance®	Princep®	Vanquish
Escort	Ronstar®	2,4-D

### Tank Mix with Oust - Perennial Weed Control

Touchdown Pro, applied at 2-4 pts. in a tank mix with Oust at 2-4 oz./A, will provide control or suppression of the following perennial weeds:

Bahiagrass	Fescue, tall
Bermudagrass	Johnsongrass
Broomsedge	Poor Joe
Dallisgrass	Quackgrass
Dock, curly	Vaseygrass
Dogfennel	Vervain, blue

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

### Railroads

For specific rates, refer to Tables 1-4 for annual and perennial weed control.

Touchdown Pro may be used to maintain bare ground on railroad ballast and shoulders. Repeat applications of Touchdown Pro may be used, as weeds emerge, to maintain bare ground. Touchdown Pro may be used to control tall-growing weeds to improve line-of-sight at railroad crossings and reduce the need for mowing along rights-of-way. For crossing applications, up to 80 gals. of spray solution per acre may be used. Touchdown Pro may be tank mixed with the following products for ballast, shoulder, spot, bare ground, and crossing treatments.

Arsenal	Escort	Krovar	Spike®	2,4-D
Banvel	Garlon™	Oust	Telar	
Diuron	Hyvar®	Sahara	Vanquish	

### Roadsides

Touchdown Pro may be used on road shoulders, medians, and landscape areas. It may be applied with boom sprayers, shielded boom sprayers, high-volume off-center nozzles, hand-held equipment, and similar equipment.

Touchdown Pro may be used to control weeds growing under guardrails and around signposts and other objects along the roadside.

Touchdown Pro may be used as a spot treatment to control unwanted vegetation growing along roadsides.

Touchdown Pro may be tank mixed with the following products for shoulder, guardrail, spot, and bare ground treatments:

Banvel	Escort	Pendulum	Sahara	Telar
Diuron	Krovar	Princep	Simazine	Vanquish
Endurance	Oust	Ronstar	Surflan	2,4-D

### Bermudagrass and Bahiagrass Release

**Applications to Dormant Bermudagrass** - Touchdown Pro may be used to control or suppress many winter annual weeds and tall fescue for effective release of dormant bermudagrass. Treat only when bermudagrass and bahiagrass are dormant. Apply in 10-25 gallons of water per acre to winter annuals less than 6 inches in height and tall fescue at or beyond the 4-6 leaf stage for best results. See the following table for rate recommendations.

**Table 7: Rates to Achieve Control (C) or Suppression (S) in Dormant Bermudagrass and Bahiagrass**

Weed Species	Touchdown Pro fluid oz/acre				
	8	12	16	24	32
Barley, little	S	C			
Bedstraw, catchweed	S	C			
Bluegrass, annual	S	C			
Chervil	S	C			
Chickweed, common	S	C			
Clover, crimson	*	S	S	C	
Clover, largehop	*	S	S	C	
Fescue, tall	*	*	*	*	S
Geranium, Carolina	*	*	S	S	C
Henbit	*	S	C		
Ryegrass, Italian	*	*	S	C	
Speedwell, corn	S	C			
Vetch, common	*	*	S	C	

\*These rates apply only to sites where an established competitive turf is present.

**Bermudagrass Release in Actively Growing Stands** - Touchdown Pro may be used to control or partially control many annual and perennial weeds for effective release in actively growing bermudagrass. Apply 1-3 pts. of Touchdown Pro in 10-25 gallons of spray solution per acre. Use the lower rate when treating annual weeds below 6 inches in height or runner length. Use the higher rate as weeds increase in size or as they approach flower or seedhead formation. Higher rates will also provide partial control or longer-term suppression of the following perennial species. Lower rates will provide shorter-term suppression.

Bahiagrass	Johnsongrass*
Dallisgrass	Trumpetcreeper**
Fescue, tall	Vaseygrass

\*Johnsongrass is controlled at the higher rate

\*\*Suppression at the higher rate only.

Use only on well-established bermudagrass. Bermudagrass injury may occur but regrowth will occur under moist conditions. Repeat applications are not recommended in the same season as severe injury may occur.

**Bahiagrass Seedhead and Vegetative Suppression** - Touchdown Pro, at 6 oz. in 10-25 gallons of spray solution per acre, may be used to suppress vegetative growth and inhibit seedhead formation of actively growing bahiagrass for approximately 45 days. Make applications 1-2 weeks after green-up or after mowing to a height of 3-4 inches. Applications must be made before seedhead emergence. Suppression can be extended to 120 days with an application of Touchdown Pro at 4 oz., followed in 45 days with an application at 2-4 oz. Do not make more than 2 applications per year.

**Annual Grass Suppression in Rough Turf** - Touchdown Pro at 4-5 oz. in 10-40 gallons of spray solution per acre, may be used to suppress growth of some annual grasses (such as annual ryegrass, wild barley, and wild oats) growing in coarse turf on roadsides or other industrial areas. Make applications when annual grasses are actively growing and before seedheads are in the boot stage. Treatments after seedhead emergence may cause injury to desired grasses.

### **Woody Brush and Tree Management**

Touchdown Pro may be used to control woody brush and tree weeds in any area described in **GENERAL USE AREAS**.

Apply Touchdown Pro as a broadcast spray, using boom-type or boomless nozzles.

Apply a 0.75-2% solution of Touchdown Pro when using high-volume spray-to-wet applications. Use a 5-10% solution of Touchdown Pro when using low volume directed sprays for spot treatment.

For weeds that have been mowed, grazed, or cut; allow regrowth to occur prior to treatment. Reduced results may occur when treating weeds heavily covered with dust.

### Tank Mixtures for Woody Brush Control on Railroad Rights-of Way

Touchdown Pro can be tank mixed with the following products for enhanced control of woody brush and trees.

Arsenal	Garlon
Escort	Tordon®

### Cut Stumps

Touchdown Pro will control regrowth of cut stumps and resprouts of many types of woody brush and tree species, some of which are listed. Apply Touchdown Pro using suitable equipment to ensure coverage of the entire cambium. Cut trees or resprouts close to the soil surface. Apply a 50-100% solution of Touchdown Pro completely covering the freshly-cut surface immediately after cutting. Application delay may result in reduced performance. For best results, applications should be made during periods of active growth and full leaf expansion. Avoid applications during peak sap flow in spring.

Alder	Madrone	Salt-cedar
Coyote Brush	Maple	Sweetgum
Dogwood	Oak	Tan oak
Eucalyptus	Poplar	Willow
Hickory	Reed, giant	

**Note:** Avoid making cut stump applications when roots of desirable adjacent trees may have grafted onto the roots of the cut stump.

### Tree Injections and Frill Applications

Touchdown Pro may be used to control woody brush and trees by using injection and frill applications in any areas described in **GENERAL USE AREAS**.

Apply the equivalent of 1 ml of this product per each 2-3 inches of trunk diameter at breast height (DBH). For best results, apply a 25-100% solution of Touchdown Pro to a continuous frill or to evenly spaced cuts around the tree below all branches. In larger diameter trees, better results are achieved by applying diluted material to a continuous frill or more closely spaced cuttings.

Avoid runoff in species that exude sap freely by making frills or cuts at an oblique angle, producing a cupping effect. Use Touchdown Pro in an undiluted form. For best results, avoid applications during peak sap flow in the spring. Make applications during periods of active growth and after full leaf expansion.

Following is a partial list of species that can be controlled using this technique.

Black gum <sup>1</sup>	Oak
Dogwood <sup>1</sup>	Poplar
Hickory <sup>1</sup>	Sweetgum
Maple, red <sup>1</sup>	Sycamore

<sup>1</sup>Partial Control

**Note:** Avoid making injection or frill applications when roots of desirable adjacent trees may have grafted onto the roots of the cut stump.

### ORNAMENTAL AND PLANT NURSERY USES; CHRISTMAS TREES

For specific use rates, refer to Tables 1-4 for annual and perennial weed control.

Touchdown Pro may be post-directed around established woody ornamental species such as arborvitae, azalea, boxwood, crabapple, euonymus, fir, Douglas fir, jojoba, hollies, lilac, magnolia, maple, oak, privet, pine, spruce, and yew. Touchdown Pro may also be used to trim-and-edge around trees, buildings, greenhouses, shadehouses, sidewalks and roads, potted plants, and other objects in a nursery setting.

Desirable plants may be protected from the spray solution by using shields or coverings made of cardboard or other impermeable material. TOUCHDOWN PRO IS NOT RECOMMENDED FOR USE AS AN OVER-THE-TOP BROADCAST SPRAY IN ORNAMENTALS AND CHRISTMAS TREE SPECIES. Care must be exercised to avoid contact of spray, drift, or mist with foliage or green bark of established ornamentals.

When applying Touchdown Pro to control weeds in and around shadehouses and greenhouses, desirable vegetation must not be present and air circulation fans must be off.

#### Field Grown Christmas Trees

For specific rates, refer to Tables 1-4 for annual and perennial weed control.

**Method of Application:** Post-directed spray; site preparation; and spot spray.

Touchdown Pro may be used prior to planting Christmas trees; or as a post-directed spray and spot treatment around established Christmas trees.

Follow the directions listed in the **SPRAY ADDITIVES** and **APPLICATION PROCEDURES** sections. Refer to the **WEEDS, WOODY BRUSH AND TREES CONTROLLED** sections for application rates.

### **General Use Precautions for Christmas Trees**

- Avoid contact of spray, drift, or mist with foliage or green bark of established Christmas trees.
- This product is not recommended for broadcast applications over the top of Christmas trees.

### **GENERAL HABITAT MANAGEMENT AND HABITAT RESTORATION**

Touchdown Pro may be used to control exotic and other undesirable vegetation in habitat management and natural areas, including rangeland and wildlife refuges, including riparian and estuarine areas. Applications can be made to allow recovery of native plant species, prior to planting desirable native species, and for similar broad spectrum vegetation control requirements in habitat management areas. Spot treatments can be made to selectively remove unwanted plants for habitat maintenance and enhancement. Touchdown Pro can be tank mixed with the following products:

Banvel	Simazine
Direx®	Surflan
Diuron	Vanquish
Princep® Caliber 90®	2,4-D

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

### **Wildlife Food Plots**

Touchdown Pro may be used for site preparation for control of annual and perennial weeds prior to planting wildlife food plots. Any wildlife food species may be planted or native species may be allowed to repopulate the area after applying Touchdown Pro. If tillage is needed to prepare a seedbed, wait 7 days after application before tillage.

### **AQUATIC AND WETLAND SITES**

Use Touchdown Pro to control emerged, floating, and marginal weeds in aquatic and wetland sites (see Table 2 for list of weeds controlled). These sites include all bodies of fresh or brackish water which are flowing, nonflowing, or transient. Aquatic and wetland sites include bayous; canals; estuaries; irrigation and drainage ditches; lakes; marshes; ponds; reservoirs; rice levees; rivers; seeps; streams; wastewater treatment facilities; wildlife habitat restoration and management areas, and similar sites.

Touchdown Pro will only control plants which are emerged from the water during the application.

There are no restrictions on the use of treated water for irrigation, recreation, or domestic purposes.

Consult local state fish and game agency; and local public water control authorities before applying this product in and around public water. Permits may be required to treat such water.

Do not apply this product directly to water within 0.5 mile up-stream of an active potable water intake in flowing water (i.e. river, stream, etc.) or within 0.5 mile of an active potable water intake in a standing body of water such as lake, pond, or reservoir. To make aquatic applications around and within 0.5 mile of active potable water intakes, the water intake must be turned off for a minimum period of 48 hours after the application. The water intake may be turned on prior to 48 hours if the glyphosate level in the intake water is below 0.7 part per million as determined by laboratory analysis. These aquatic applications may be made ONLY in those cases where there are alternative water sources or holding ponds which would permit the turning off of an active potable water intake for a minimum period of 48 hours after the applications. This restriction does NOT apply to intermittent inadvertent overspray of water in terrestrial use sites.

For treatments after drawdown of water or in dry ditches, allow 7 or more days after treatment before reintroduction of water to achieve maximum weed control. Apply this product within 1 day after drawdown to ensure application to actively growing weeds.

Retreatment of floating mats of vegetation may be necessary for complete control due to splashing of the sprayed foliage. Avoid wash-off of the treated foliage for at least 2 hours following application. Wait at least 24 hours before retreating foliage.

In flowing waters, applications should be made while traveling upstream to prevent concentration of herbicide in the treated area. When treating weeds on the banks, avoid overlap more than one foot into open water. Avoid spray and drift to areas where no woody brush, trees, or weeds are present. The maximum application rate of 5 qts./A must not be exceeded in any single broadcast application that is being made over water except as follows:

- Stream crossings in utility rights-of-way.
- Where applications will result in less than 20% of the total water area being treated.

Treatment of dense emerged weeds may result in oxygen loss in the water from decomposition of the dead weeds. Oxygen depletion may result in fish kill. Therefore, treat only 1/3 to 1/2 of the total water body at one time, especially if dense weeds exist and wait 14-21 days between treatments.

Touchdown Pro may be used in the following terrestrial sites which may include aquatic and wetland areas:

Airports	Pasture and rangeland (including stock tanks,
Forests	watering holes, and ponds)
Golf courses	Petroleum tank farms
Habitat restoration and management areas	Pipeline, power, telephone and utility rights-of-way
Highways/roadways	Pumping installations
Industrial plant sites	Railroads
Lumberyards	Roadsides
Natural areas	Schools
Parking areas	Storage areas
Parks	Similar industrial and noncrop sites

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## **STORAGE AND DISPOSAL**

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

### **Pesticide Disposal**

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

### **Container Handling (2.5 gal.)**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

### **Container Handling (10 gal. and 15 gal. Link Pak)**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over



onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

### **Container Handling (30 gal. and Bulk)**

Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available 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.

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

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Barricade<sup>®</sup>, Endurance<sup>®</sup>, Princep<sup>®</sup>, Princep<sup>®</sup> Caliber 90<sup>®</sup>, Touchdown<sup>®</sup>, Vanquish<sup>®</sup>, the Syngenta logo, and the CP Frame [icon] are trademarks of a Syngenta Group Company.

Arsenal<sup>®</sup>, Chopper<sup>®</sup>, Pendulum<sup>®</sup>, Plateau<sup>®</sup>, and Sahara trademarks of BASF Speciality Products.

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Direx<sup>®</sup> trademark of Griffin L.L.C.

Escort<sup>®</sup>, Hyvar<sup>®</sup>, Krovar<sup>®</sup>, Oust<sup>®</sup>, and Telar<sup>®</sup> trademarks of E. I. duPont de Nemours & Co., Inc.

Garlon<sup>™</sup>, Garlon<sup>™</sup> 3A, Garlon<sup>™</sup> 4, Spike<sup>®</sup>, Surflan<sup>®</sup>, and Tordon<sup>®</sup> trademarks of Dow AgroSciences.

Ronstar<sup>®</sup> trademark of Bayer ES Turf & Ornamental.

~~No express or implied license is granted to use or sell Touchdown Pro under any patent in any country except as specified. Country: United States of America.~~

~~U. S. Patent No. 5,468,718.~~

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For non-emergency (e.g., current product information), call Syngenta Crop Protection at 1-800-334-9481
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Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

SCP 1121A L1D 0909	[2.5 gal., Product ID 31857]
SCP 1121A L2C 0909	[10 gal. LinkPak, Product ID 30750]
SCP 1121A-L3C 0909	[15 gal. LinkPak, Product ID 15470] [30 gal., Product ID 29425] [Bulk, Product ID 31887]

430852

Base Label  
(2.5 gallon, 10 gallon Link Pak)

Touchdown® Pro

Herbicide

IQ® Technology

Nonselective Foliar Systemic Herbicide for Weed Control

Active Ingredient:	
*Glyphosate: N-(phosphonomethyl) glycine .....	28.3%
Other Ingredients:	71.7%
Total:	100.0%

\*Contains 3 pounds of glyphosate acid in each gallon, in the diammonium salt form.

See additional precautionary statements and directions for use inside booklet.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

EPA Reg. No. 100-1121

EPA Est. 100-LA-001      [2.5 gal., 10 gal. Link Pak]

44052

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control or doctor for treatment advice</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
<p align="center"><b>HOT LINE NUMBER</b></p> <p align="center">For 24 Hour Medical Emergency Assistance (Human or Animal) Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident), Call <b>1-800-888-8372</b></p>	

### **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.

#### **Environmental Hazards**

Do not apply directly to water, or to areas where surface water is present (unless use is for aquatic weed control as described on this label), or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

45052

## **Storage and Disposal**

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

## **Pesticide Disposal**

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

## **Container Handling [2.5 gal.]**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container  $\frac{1}{4}$  full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or mix tank or store rinsate for later use and disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available 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.

## **Container Handling [10 gal. Link Pak]**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

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

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U.S. Patent No. 5,468,718

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Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

SCP 1121A-L1D 0909 [2.5 gal., Product ID 31857]  
SCP 1121A L2C 0909 [10 gal. LinkPak, Product ID 30750]

PSL  
(15 gal LinkPak., 30 gal., Bulk)

Touchdown® Pro

Herbicide

IQ® Technology

Nonselective Foliar Systemic Herbicide for Weed Control

Active Ingredient:

\*Glyphosate: N-(phosphonomethyl) glycine ..... 28.3%

Other Ingredients: ..... 71.7%

Total: ..... 100.0%

\*Contains 3 pounds of glyphosate acid in each gallon, in the diammonium salt form.

**KEEP OUT OF REACH OF CHILDREN.**

**CAUTION**

See additional precautionary statements and directions for use in booklet.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. Refer to supplemental labeling under "Agricultural Use Requirements" in the Directions for Use section for information about this standard.

EPA Reg. No. 100-1121

EPA Est. 100-LA-001 (15, 30 gal.)

EPA Est. \_\_\_\_\_ (Bulk)

SCP 1121A-L5C 0909 (30 gal. – Product ID 29425)

SCP 1121A-L6C 0909 (Bulk – Product ID 31887)

SCP 1121A-L7B 0909 (15 gal. – Product ID 15470)

\_\_\_\_ gallons

U.S. Standard Measure

<b>FIRST AID</b>	
<b>If in eyes</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice..</li> </ul>
<b>If on skin or clothing</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>If swallowed</b>	<ul style="list-style-type: none"> <li>• Call a poison control center or doctor immediately for treatment advice.</li> <li>• Have person sip a glass of water if able to swallow.</li> <li>• Do not induce vomiting unless told to do so by a poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>If inhaled</b>	<ul style="list-style-type: none"> <li>• Move person to fresh air.</li> <li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li> <li>• Call a poison control center or doctor for further treatment advice.</li> </ul>
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment.</p>	
<p align="center"><b>HOT LINE NUMBER</b>            For 24 Hour Medical Emergency Assistance (Human or Animal)            Or Chemical Emergency Assistance (Spill, Leak, Fire or Accident),            Call  <b>1-800-888-8372</b></p>	

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## **PRECAUTIONARY STATEMENTS**

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### **Hazards to Humans and Domestic Animals**

#### **CAUTION**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling.



## **Personal Protective Equipment (PPE)**

### **Applicators and other handlers must wear:**

- Long-sleeved shirt and long pants
- Socks and shoes

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, enclosed cabs, or aircraft 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.

### **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**

Do not apply directly to water, or to areas where surface water is present (unless use is for aquatic weed control as described on this label), or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters.

## **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

**NOTICE:** Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product should be followed carefully. 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 manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of SYNGENTA CROP PROTECTION, LLC or Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold SYNGENTA and Seller harmless for any claims relating to such factors.

SYNGENTA warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the Directions for Use, subject to the inherent risks referred to above, when used in accordance with directions under normal use conditions. 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 or SYNGENTA, and Buyer and User assume the risk of any such use. SYNGENTA MAKES NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ABOVE.

In no event shall SYNGENTA or Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF SYNGENTA AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF SYNGENTA OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

SYNGENTA and Seller offer this product, and Buyer and User accept it, subject to the foregoing Conditions of Sale and Limitations of Warranty and of Liability, which may not be modified except by written agreement signed by a duly authorized representative of Syngenta.

## **DIRECTIONS FOR USE**

To be used in accordance with the directions for use in Touchdown Pro label booklet.

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### **STORAGE AND DISPOSAL**

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

#### **Pesticide Disposal**

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

#### **Container Handling [15 gallon]**

Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank. Fill the container  $\frac{1}{4}$  full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available 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.

#### **Container Handling [30 gallon and Bulk]**

Refillable container. Refill this container with pesticide only. Do not use this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

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This product is sold only for uses stated on its label.

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Manufactured for:  
Syngenta Crop Protection, LLC  
P.O. Box 18300  
Greensboro, North Carolina 27419-8300

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