PULL HERE TO OPEN

TOUCHDOWN® PRO HERBICIDE

iQ TECHNOLOGY

Herbicide

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 inside booklet.

EPA Reg. No. 100-1121
EPA Est. 100-LA-001

SCP 1121A-L1C 0203

2.5 gallons
U.S. Standard Measure

syngenta

SCP 130-1121A-L1C

FIRST AID	
If in eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing	• Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
If swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If inhaled	• Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. • Call a poison control center or doctor for further treatment advice.
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**	

PRECAUTIONARY STATEMENTS

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, Inc. 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.

STORAGE AND DISPOSAL

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 Disposal

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

GENERAL INFORMATION

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[1]	Ragweed, common[1]
Balsamapple[2]	Fleabane, flaxleaf	Ragweed, giant
Barley[1]	Fleabane, hairy *(Conyza bonariensis)*[1]	Red rice
Barnyardgrass[1]	Fleabane, rough[1]	Redweed
Basia, livehook	Florida pusley	Russian thistle
Bittercress[1]	Foxtail[1]	Rye[1]
Black nightshade[1]	Goatgrass, jointed[1]	Ryegrass[1]
Bluegrass, annual[1]	Goosefoot	Sandbur, field[1]
Bluegrass, bulbous[1]	Goosegrass, nettleleaf	Shattercane[1]
Brassica, fivehook	Grain sorghum (milo)[1]	Shepherdspurse[1]
Brome, downy[1]	Groundcherry[1]	Sicklepod
Brome, Japanese[1]	Groundsel, common[1]	Signalgrass, broadleaf[1]
Browntop panicum[1]	Hemp sesbania	Smartweed, ladysthumb[1]
Buffalobur	Henbit	Smartweed, Pennsylvania[1]
Buttercup[1]	Horseweed/Marestail *(Conyza canadensis)*	Sowthistle, annual
Carolina foxtail[1]	Itchgrass[1]	Spanishneedles
Carolina geranium	Johnsongrass, seedling	Speedwell, purslane[1]
Cheat[1]	Junglerice	Sprangletop[1]
Cheatgrass	Knotweed	Spurge, annual
Chervil[1]	Kochia	Spurge, prostrate[1]
Cheeseweed	Lambsquarters[1]	Spurge, spotted[1]
Chickweed[1]	Little barley[1]	Spurry, umbrella[1]
Cocklebur[1]	London rocket[1]	Starthistle, yellow
Coffee senna	Mayweed	Stinkgrass[1]
Copperleaf, hophornbeam	Medusahead[1]	Sunflower[1]
Corn[1]	Morningglory *(Ipomoea spp.)*	Teaweed/Prickly sida
Corn speedwell[1]	Mustard, blue[1]	Texas panicum[1]
Cowpea	Mustard, tansy[1]	Velvetleaf
Crabgrass[1]	Mustard, tumble[1]	Vetch, common
Croton, tropic	Mustard, wild[1]	Virginia copperleaf
Dwarfdandelion[1]	Oats	Virginia pepperweed[1]
Eastern mannagrass[1]	Panicum	Waterhemp[1]
Eclipta[1]	Pigweed[1]	Wheat[1]
Fall panicum[1]	Plains/Tickseed coreopsis[1]	Wild oats[1]
Falsedandelion[1]	Poinsettia, wild[1]	Witchgrass[1]
Falseflax, smallseed[1]	Prickly lettuce[1]	Woolly cupgrass[1]
Fiddleneck	Puncturevine	Yellow rocket
Field pennycress[1]	Purslane, common	
Filaree	Rabbitfootgrass	

[1]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.

[2]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)[1]
Alfalfa	1-3
Alligatorweed[2]	3-5
Anise/Fennel	2-5
Bahiagrass	3-5
Beachgrass, European	3-5
Bentgrass[2]	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[1]	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

continued...

Table 2: Perennial Weeds Controlled *(continued)*

Weed	Rate (qts./A)[1]
Paragrass	2-5
Pepperweed, perennial	3-5
Phragmites[2]	2-5
Poison hemlock	2-5
Quackgrass	1-3
Redvine[2]	1-3
Reed, giant	2-5
Ryegrass, perennial	1-3
Smartweed, swamp	2-5
Spatterdock	3-5
Spurge, leafy[2]	2-5
Starthistle, yellow	3-5
Sweet potato, wild[2]	2-5
Thistle, artichoke	1-3
Thistle, Canada	1-3
Timothy	1-3
Torpedograss[2]	2-5
Trumpetcreeper[2]	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

[1]Or use a 2% solution for spot spray clean-up
[2]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)[1]
Alder	3-4
Ash[2]	2-5
Aspen, quaking	2-5
Bearmat (Bearclover)[2]	2-5
Beech[2]	2-5
Birch	1-2
Blackberry	3-4
Blackgum	2-5
Bracken	2-5
Broom, French and Scotch	2-5
Buckwheat, California[2]	2-5
Cascara[2]	5

continued...

Table 3: Woody Brush and Trees Controlled *(continued)*

Weed	Rate (qts./A)[1]
Catsclaw[2]	5
Ceanothus[2]	2-5
Chamise[2]	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[2]	2-5
Elderberry	1-2
Elm[2]	2-5
Eucalyptus, bluegum	2-5
Florida holly (Brazilian peppertree)[2]	2-5
Gallberry	2-5
Gorse[2]	2-5
Hackberry, western	2-5
Hasardia[2]	2-5
Hawthorn	1-5
Hazel	1-2
Hickory[2]	2-5
Honeysuckle	3-4
Hornbeam, American[2]	2-5
Huckleberry	2-5
Kudzu	4-5
Locust, black[2]	2-5
Madrone, resprouts[2]	5
Magnolia, sweetbay	2-5
Manzanita	2-5
Maple, red	2-5
Maple, sugar	5
Monkey flower[2]	2-5
Oak, black and white[2]	2-5
Oak, northern and pin	2-5
Oak, post	3-4
Oak, red	2-5
Oak, scrub[2]	2-5
Oak, southern red	1-5
Orange, osage	2-5
Persimmon[2]	2-5
Pine	2-5
Poison ivy	4-5
Poison oak	4-5
Poplar, yellow[2]	2-5
Prunus	2-5
Raspberry	3-4
Redbud, eastern	2-5
Redcedar, eastern	2-5
Rose, multiflora	1-2
Russian olive[2]	2-5
Sage brush, California	2-5
Sage, black	2-5
Sage, white[2]	2-5
Sago, black	2-5
Salmonberry	1-2

continued...

Table 3: Woody Brush and Trees Controlled *(continued)*

Weed	Rate (qts./A)[1]
Saltbrush, Seamyrtle	2-5
Saltcedar[2]	2-5
Sassafras[2]	2-5
Sourwood[2]	2-5
Sumac (laurel[2], poison, smooth, sugarbrush, and winged[2])	2-5
Sweetgum	1-5
Swordfern[2]	2-5
Tallowtree, Chinese	5
Tan oak resprouts[2]	5
Thimbleberry	1-2
Tobacco, tree[2]	2-5
Toyon	2-5
Trumpetcreeper	1-5
Vine maple[2]	2-5
Virginia creeper	2-5
Waxmyrtle, southern[2]	2-5
Willow	3-4
Yerbesenta, California	2-5

[1] Or use a 2% solution for spot spray clean-up
[2] 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 by 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
Panicum, Texas
Rye, common
Shattercane
Sicklepod
Spanishneedles
Starbur, bristly

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 1/2 full with clean water.
2. Begin tank agitation and continue throughout mixing and spraying.
3. Add dry formulations (WP, DF, etc.) to tank.
4. Add liquid formulations (SC, EC, L, etc.) to tank.
5. Add Touchdown 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.

SPECIFIC USE DIRECTIONS

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 rate 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 green-up. 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 green-up.

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	Trumpetcreeper
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	Trumpetcreeper
Bluestem, silver	Dock, curly	Johnsongrass	Vaseygrass
Broomsedge	Dogfennel	Poorjoe	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 green-up. 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, nondormant 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	*Pseudotsuga menziesii*	Apply 1-1.5 qts./A at end of first growing season (except CA).
Fir	*Abies* spp.	
Hemlock	*Tsuga* spp.	Do not add surfactant. Injury may result.
Pines	*Pinus* 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	*Sequoia* spp.	Do not add surfactant. Injury may result.
Spruce	*Picea* 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	*Pinus strobus*	• Apply 1-1.5 qts./A during late summer or early fall on established stands. • Apply 1 qt./A at end of first growing season. • Make sure final fall resting buds have formed before application.
Loblolly Pine	*Pinus taeda*	
Long-leaf Pine	*Pinus palustris*	
Short-leaf Pine	*Pinus echinata*	
Slash Pine	*Pinus elliottii*	
Virginia Pine	*Pinus virginiana*	

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	Poorjoe
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

	Touchdown Pro Fluid Oz./Acre				
Weed Species	**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[1]	Oak
Dogwood[1]	Poplar
Hickory[1]	Sweetgum
Maple, red[1]	Sycamore

[1]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: Postdirected spray; site preparation; and spot spray.

Touchdown Pro may be used prior to planting Christmas trees; or as a postdirected 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, watering holes, and ponds)
Forests	Petroleum tank farms
Golf courses	Pipeline, power, telephone and utility rights-of-way
Habitat restoration and management areas	Pumping installations
Highways/roadways	Railroads
Industrial plant sites	Roadsides
Lumberyards	Schools
Natural areas	Storage areas
Parking areas	Similar industrial and noncrop sites
Parks	

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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.

Syngenta Crop Protection, Inc.
Greensboro, North Carolina 27409
www.syngenta-us.com

SCP 1121A-L1C 0203

TOUCHDOWN PRO with iQ

Herbicide

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.

EPA Reg. No. 100-1121
EPA Est. 100-LA-001

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SCP 1121A-L1C 0203

KEEP OUT OF REACH OF CHILDREN.

CAUTION

FIRST AID

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

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.**

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.

Storage and Disposal

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 Disposal

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

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

2.5 gallons

U.S. Standard Measure

syngenta

syngenta

TOUCHDOWN PRO

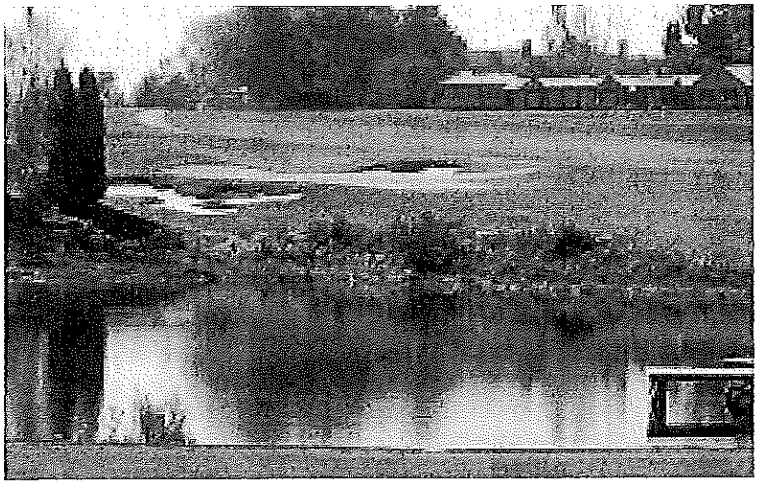
Get the Point of Complete Weed Control

Delivering more active ingredient to the growing points of target weeds is a key feature for Touchdown® PRO herbicide. Unlike other glyphosate products, it uses intact cells to efficiently translocate the active ingredient to these underground growing points, where it is highly effective.

A systemic non-selective herbicide, Touchdown PRO provides post-emergence weed control for:

- Golf courses
- Landscape areas
- Production and landscape ornamental areas
- Ponds, lakes, and canals

In fact, it offers excellent plant management in these aquatic areas, as it controls invasive and nuisance plants.



Broad-Spectrum Control, Wide Range of Uses
Touchdown PRO delivers post-emergence control of more than 170 annual and perennial weeds, including vines and woody brush. It may be applied on golf courses, in ornamental nursery production, and in commercial application to residential sites. Other landscape areas where it may be applied include roadsides, railroads, rights-of-way, and industrial sites.

Glyphosate Salt Forms Uniquely Effective Active Ingredient
The Touchdown PRO glyphosate molecule represents an innovative active ingredient that's different from other glyphosate products in that it is a diammonium salt. While other glyphosate products may injure the cells used in herbicide translocation, inhibiting active ingredient from moving systemically, Touchdown PRO herbicide's active ingredient leaves cells intact. It works by interrupting the production of key chemicals within the plant by transforming the shape of the EPSP receptor site. As a result, photosynthesis slows, chlorophyll degrades, auxins decline, and plastids burst.

IQ® Technology Gets Product Where It Needs to Be
This patented formulation technology was created by Syngenta, the same company that brought you other inventive products like Daconil® Weather Stik® technology. This technology offers two advantages: 1) a highly effective glyphosate salt formulation, and 2) a unique adjuvant delivery system that optimizes its effectiveness. IQ Technology enhances the systemic action, getting more of the active ingredient across the leaf surface and into the plant, and ultimately to the underground points where it will work best.

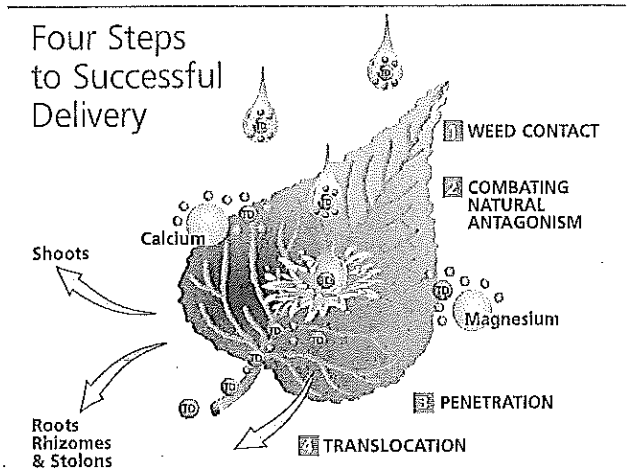
How Does This Systemic Delivery System Work?

1 **Good Weed Contact** Fully built-in wetter increases spray drop retention on the leaf, enhancing absorption.

2 **Combating Natural Antagonism** It maximizes the amount of glyphosate available for uptake by neutralizing positively charged ions such as calcium and magnesium.

3 **Penetration** Essential for effective systemic activity, it aids the active ingredient's penetration without rupturing the plant's epidural cells, providing even more herbicide to shoots and roots.

4 **Translocation** Components of the formulation aid movement through vascular tissue to the shoots, roots, and rhizomes.



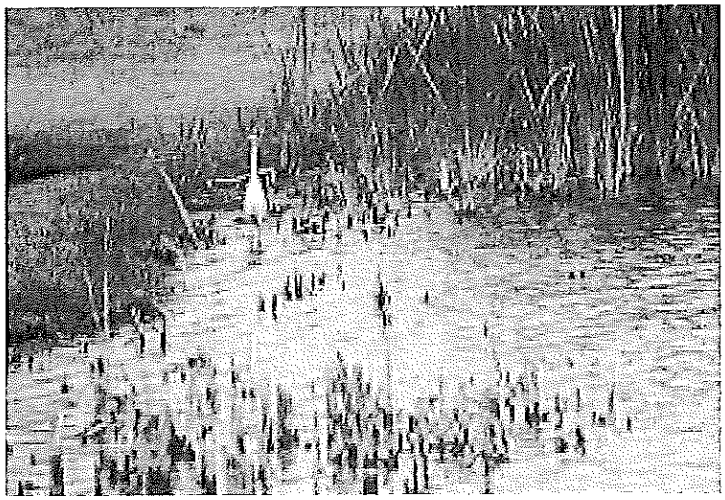
Absorption into the plant tissue and translocation are measurable within an hour following application. Generally, 25–50% is translocated in the first few days, for complete control within 2–3 weeks.

Application of Touchdown PRO

For most practical weed control, apply Touchdown PRO to smaller weeds soon after emergence. Touchdown PRO is also quite effective, however, on fully mature perennial weeds after they reach the reproductive stage of growth. That would be seedhead initiation in grasses, and bud formation in broadleaves. For very large weeds, use the higher application rate within the recommended range. Allow 7 or more days after application before tillage.

Environmental Profile

With a signal word CAUTION, Touchdown PRO offers a favorable safety and environmental profile. It's easy to handle, it's easy to use, and it has no soil activity, binding immediately to the clay and organic matter in the soil, where it remains on the soil surface without leaching. Depending upon soil type and conditions, soil microbes completely degrade the herbicide to carbon dioxide and biologically inactive mineral compounds within a few days or weeks after application. In addition, it is not volatile. After application, it cannot move as a vapor to affect nearby vegetation.



Translocates for Optimal Control

- Broad-spectrum, systemic, non-selective weed control
- Controls more than 170 species, including vines and woody brush
- High-performance formulation of glyphosate
- "Built-in" surfactants wet the surface for good penetration
- IQ Technology delivers product to sub-surface growth points

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Call 1-800-395-8873 to contact your local Syngenta turf and ornamental technical representative or sales representative and learn more about Touchdown PRO.

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