

31-JAN-2003

GROUP	9	HERBICIDE
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TOUCHDOWN[®] XP
Liquid Herbicide

AGRICULTURAL

For Control of Annual and Perennial Grasses and Broadleaf Weeds

GUARANTEE:

glyphosate440 g/L acid equivalent
(present as 640 g/L trimethylsulfonium salt)

KEEP OUT OF REACH OF CHILDREN
READ THE LABEL AND ATTACHED BOOKLET BEFORE USING



POTENTIAL SKIN SENSITIZER
CAUTION: EYE IRRITANT

REGISTRATION NO. **24318**
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **10L, 110L, BULK**

Syngenta Crop Protection Canada, Inc.
140 Research Lane
Research Park, University of Guelph
Guelph, ON N1G 4Z3

Label

NOTICE TO USER

This control product is to be used only in accordance with the directions on this label. It is an offense under the *Pest Control Products Act* to use a control product under unsafe conditions.

NOTICE TO BUYER

Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

IF SWALLOWED, IMMEDIATELY dilute by swallowing water or milk. Call a physician or contact a poison control centre.

IF IN EYES, flush IMMEDIATELY with plenty of water for at least 15 minutes. Call a physician or contact a poison control centre.

IF ON SKIN, flush with plenty of water. Remove any contaminated clothing and wash separate from house laundry before reuse. If irritation develops, contact a physician or a poison control centre.

TOXICOLOGICAL INFORMATION

Treat symptomatically if ingested or if contact is made with eyes or skin.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

1. **When handling the concentrate:**
 - * Wear a long sleeve shirt & long pants or coveralls, chemical resistant gloves and eye protection.
 - * Wash splashes from skin and eyes immediately with plenty of water.
2. **When spraying:**
 - * Wear a long sleeve shirt and long pants or coveralls.
 - * Avoid working in spray mist.
 - * Avoid all drift or contact with other vegetation. See ENVIRONMENTAL HAZARDS
3. **After spraying:**
 - * Wash hands and shower thoroughly.
4. **As with all agrochemical products:**

- * When using, do not eat, drink or smoke.
- * Wash hands and exposed skin with soap and water thoroughly before eating, drinking or smoking.
- * Wash out container thoroughly, empty washings into spray tank and dispose of safely. See DISPOSAL statement.
- * Keep away from food, drink and animal feeding stuffs.
- * Do not contaminate ponds, waterways or ditches with chemical. See ENVIRONMENTAL HAZARDS.
- * Store in original container, tightly closed, in a safe place.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in U.S., contact 1-866-375-4648 or www.cropro.org.

PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of TOUCHDOWN XP Liquid Herbicide should be mixed, stored and applied only in stainless steel, aluminium, fibreglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY TOUCHDOWN XP LIQUID HERBICIDE OR SPRAY SOLUTIONS OF TOUCHDOWN XP LIQUID HERBICIDE IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. TOUCHDOWN XP Liquid Herbicide or spray solutions of TOUCHDOWN XP Liquid Herbicide react with such containers and tanks to produce hydrogen gas which may form a highly combustible gas mixture. This gas mixture could flash or explode, causing serious personal injury, if ignited by open flame, spark, welder's torch, lighted cigarette or other ignition source.

ENVIRONMENTAL HAZARDS

Avoid direct application to any body of water populated with fish or used for domestic purposes. Do not use in areas where adverse impact on domestic water or aquatic species is likely. Do not contaminate water by disposal of waste or cleaning of equipment. Avoid all drift to or contact with other vegetation for which treatment is not intended as damage or destruction may occur. Do not apply using aerial spray equipment.

STORAGE

Always store in original container with top closed.
Avoid contamination of seed, feed and foodstuffs.
Product is not affected by freezing.

SPILL CLEANUP

Observe safety and protective measures as noted under PRECAUTIONS.

Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays (kitty litter, etc.) Collect contaminated absorbent, place in plastic lined metal drum and dispose of in accordance with instructions provided under DISPOSAL. Thoroughly scrub floor or other impervious surfaces with a strong industrial type detergent solution and rinse with water.

Liquid spills that soak into the ground should be dug-up, placed in **plastic-lined metal** drums and disposed of in accordance with instructions provided under DISPOSAL.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a **plastic-lined drum** or other non-leaking container and disposed of by use according to label directions or in accordance with instructions provided under DISPOSAL. Any recovered spilled liquid should be similarly collected and disposed of according to the DISPOSAL statement.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL OR REFILLING

FOR RECYCLABLE CONTAINERS:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

FOR REFILLABLE CONTAINERS:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING
CALL 1-800-327-8633 (FASTMED)***

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 - * Avoid all drift or contact with other vegetation. See ENVIRONMENTAL HAZARDS
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- * Wash out container thoroughly, empty washings into spray tank and dispose of safely. See DISPOSAL statement.
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STORAGE

Always store in original container with top closed.
Avoid contamination of seed, feed and foodstuffs.
Product is not affected by freezing.

SPILL CLEANUP

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***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING
CALL 1-800-327-8633 (FASTMED)***

PRODUCT INFORMATION

Do not apply this product using aerial equipment.

TOUCHDOWN XP Liquid Herbicide is a water soluble Herbicide for **non-selective** weed control:

In cropping systems - before planting of all crops, pre-harvest application in wheat, barley, canola, peas, soybeans, dry beans and post harvest stubble treatment.

In pasture renovation;

In forage, legume and grass establishment;
In minimum tillage systems;
In tree, vine and berry crops; apple, cherry, peach, apricot, pear, plum, grapes, blueberries, nuts, strawberries, cranberries and sugar beets.

TOUCHDOWN XP Liquid Herbicide is to be applied as a foliage spray for the control of most herbaceous plants. It may be applied through most standard industrial or field type sprayers after dilution and thorough mixing with water in accordance with the booklet instructions.

TOUCHDOWN XP Liquid Herbicide does not contain an adjuvant (wetting agent) therefore, one must be added to the spray mixture. Refer to ADJUVANTS section.

TOUCHDOWN XP Liquid Herbicide moves through the plant from the point of foliage contact into the root system. Visible effects on most annual weeds occur within 2 to 4 days but on most perennial weeds may not occur until 7 to 10 days. Extremely cool or cloudy weather at treatment time may slow down activity of this product and delay visual effects of control. Visible effects are a gradual wilting and yellowing of the plant which advances to complete browning of above ground growth and deterioration of underground plant parts.

This product does not provide residual weed control. For subsequent residual weed control apply a registered residual herbicide. Read & carefully observe cautionary statements and all other information appearing on the labels of all herbicides used.

DIRECTIONS FOR USE

GENERAL USE PRECAUTIONS

DO NOT APPLY USING AERIAL EQUIPMENT.

Reduced results may occur if water containing soil is used, such as water from ponds and ditches. Poor control may also occur when treating weeds heavily covered with dust.

Avoid contact with desirable vegetation by direct application or spray drift as destruction may result.

Avoid drift or overspray to non-target vegetation and wildlife habitats.

Do not use in greenhouses.

Mix only the amount of solution to be used during a one day period, as reduced activity may result from use of leftover solution.

Drain and clean application equipment immediately after using this product.

Do not contaminate water sources by disposal of waste or cleaning of equipment.

Maintain a 15 m buffer zone around non-target areas.

CAUTION: Do not graze the treated crops or cut for hay; sufficient data are not available to support such use.

GENERAL USE INFORMATION

Weeds Controlled

This product controls many annual and perennial grasses and broadleaf weeds when applied as recommended and under conditions described. For information on how to control specific weeds

including herbicide rate refer to the "Annual Weed Control" and "Perennial Weed Control" sections of this label. The following is a partial list of weeds controlled:

ANNUAL WEEDS

Annual Grasses

Barnyard grass	<i>Echinochloa crusgali</i>
Blue Grass (annual)	<i>Poa annua</i>
Crab Grass	<i>Digitaria sanguinalis</i>
Downy Brome	<i>Bromus tectorum</i>
Giant Foxtail	<i>Setaria faberii</i>
Green Foxtail	<i>Setaria viridis</i>
Persian Darnel	<i>Lolium persicum</i>
Rye grass, tame	<i>Secale cereale</i>
Volunteer Barley	<i>Hordeum spp.</i>
Volunteer Corn	<i>Zea Mays</i>
Wild Oats	<i>Avena fatua</i>
Volunteer Wheat	<i>Triticum spp.</i>
Yellow foxtail	<i>Setaria glauca</i>

Annual Broadleaf Weeds

Chickweed, common	<i>Stellaria media</i>
Dodder	<i>Cucuta spp</i>
Fleabane (Canada)	<i>Erigeron canadensis</i>
Flixweed	<i>Descurania sophia</i>
Hairy galinsoga	<i>Galinsoga ciliata</i>
Hemp nettle	<i>Galeopsis tetrahit</i>
Kochia	<i>Kochia scoparia</i>
Lady's-Thumb	<i>Polygonum persicaria</i>
Lamb's-Quarters (common)	<i>Chenopodium album</i>
Low cudweed	<i>Gnaphalium uliginosum</i>
Narrow-leaved Hawk's Beard	<i>Crepis tectorum</i>
Narrow-leaved Vetch	<i>Vicia angustifolia</i>
Nightshade, black	<i>Solanum ptycanthum</i>
Prickly Lettuce	<i>Lactuca scariola</i>
Prostrate knotweed	<i>Polygonum aviculare</i>
Ragweed (common)	<i>Ambrosia artemisiifolia</i>
Redroot Pigweed	<i>Amaranthus retroflexus</i>
Russian Thistle	<i>Salsola pestifer</i>
Shepherd's purse	<i>Capsella Bursa pastoris</i>
Sowthistle (annual)	<i>Sonchus oleraceus</i>
Stinkweed	<i>Thlaspi arvense</i>
Volunteer Canola	<i>Brassica spp</i>
Volunteer Flax	<i>Linaria spp</i>
Wild Buckwheat	<i>Polygonum convolvulus</i>
Wild Mustard	<i>Sinapsis arvensis</i>

PERENNIAL WEEDS

Perennial Grasses/Sedges

Blue Grass (Canada)	<i>Poa compressa</i>
Blue Grass (Kentucky)	<i>Poa pratensis</i>
Brome Grass (smooth)	<i>Bromus inermis</i>

Cattail (common)	<i>Typha latifolia</i>
Foxtail Barley	<i>Hordeum jubatum</i>
Orchard grass	<i>Dactylis glomerata</i>
Quackgrass	<i>Agropyron repens</i>
Redtop, common	<i>Agrostis alba</i>
Wirestemmed mulhy	<i>Muhlenbergia frondosa</i>
Yellow Nutsedge	<i>Cyperus esculentus</i>

Perennial Broadleaved Weeds

Alfalfa	<i>Medicago sativa</i>
Chickweed mouse-eared	<i>Cerastium fontanum</i>
Clover, white	<i>Trifolium repens</i>
Colt's foot	<i>Tussilago farfara</i>
Cottontop	<i>Eriophorum chamissionis</i>
Curled Dock	<i>Rumex crispus</i>
Dandelion, common	<i>Taraxacum officinale</i>
Field Bindweed	<i>Convolvulus arvensis</i>
Goldenrod, canada	<i>Solidago canadensis</i>
Hemp Dogbane	<i>Apocynum cannabinum</i>
Hoary Cress	<i>Cardaria draba</i>
Horsetail	<i>Equisetum arvense</i>
Jerusalem artichoke	<i>Helianthus tuberosis</i>
Knotweed (Japanese)	<i>Polygonum cuspidatum</i>
Milkweed (common)	<i>Asclepias syriaca</i>
Plantain, broadleaf	<i>Plantago major</i>
Poison Ivy	<i>Rhus radicans</i>
Round-leaved mallow	<i>Malva pusilla</i>
Sheep's sorrel	<i>Rumex acetosell</i>
Smooth bedstraw	<i>Galium mollugo</i>
Sow Thistle (perennial)	<i>Sonchus arvensis</i>
Stitchwort grassleaved	<i>Stellaria graminea</i>
Stork's bill	<i>Erodium cicutarium</i>
Thistle (Canada)	<i>Cirsium arvense</i>
Toad Flax	<i>Linaria vulgaris</i>
Wild carrot	<i>Daucus carota</i>
Wild grape	<i>Vitis spp.</i>
Wormwood (Absinth)	<i>Artemisia absinthium</i>

AGRICULTURAL USES

The following are use situations for TOUCHDOWN XP Liquid Herbicide. Information on the equipment selected to apply TOUCHDOWN XP Liquid Herbicide can be found in the APPLICATION EQUIPMENT section. Use rates can then be selected from the TOUCHDOWN XP Liquid Herbicide USE RATES section.

The type of vegetation present and the use situation will dictate the choice of application equipment.

AGRICULTURAL USES

Prior to Planting (all crops): This product may be applied prior to planting all crops for control of emerged weeds listed on this label. Apply **before** seeding or transplanting crops.

Summerfallow:

This product, or labelled tank mixes may be applied in summerfallow to control weeds listed on this label

Post Harvest Stubble Treatment:

This product, or labelled tank mixes may be applied to control weeds listed on this label

Fall Stubble:

This product, or labelled tank mixes may be applied in fall stubble to control weeds listed on this label.

Spot Treatments (In-crop):

May be used to control perennial weeds in barley, corn, oats, soybeans, wheat, strawberry, blueberry, forage grasses and legumes including seed production. Treatments may be made up to heading of small grain, initial pod set on soybeans, silking of corn, and emergence of seed heads.

The crop in the treated area will be destroyed. Avoid drift beyond the treated area. DO NOT APPLY IF CROP GROWTH HAS ADVANCED BEYOND SEED SET. DO NOT GRAZE OR HARVEST TREATED AREAS IN FORAGES. (See General Use Precautions section for more information).

Application can be made using a boom sprayer, knapsack or high volume equipment (See APPLICATION EQUIPMENT).

MINIMUM AND ZERO TILLAGE SYSTEMS (ALL FIELD CROPS INCLUDING CEREALS, OILSEEDS, PULSES, FORAGES AND CORN)

Apply prior to or after seeding but before crop emerges for control of emerged weeds. DO NOT APPLY AFTER CROP EMERGENCE.

Since TOUCHDOWN XP Liquid Herbicide does not provide residual weed control, application too far in advance of seeding will allow weeds to emerge between application and crop emergence.

MINIMUM AND ZERO TILLAGE TANK MIXTURES:

ALWAYS REFER TO THE RESPECTIVE PRODUCT LABEL FOR FURTHER INFORMATION ON WEEDS CONTROLLED, APPLICATION DIRECTIONS, AND USE PRECAUTIONS.

TOUCHDOWN XP Liquid Herbicide plus PARDNER

TOUCHDOWN XP Liquid Herbicide plus bromoxynil (PARDNER) can be applied prior to seeding or after seeding, but before crop emergence in wheat, barley and oats.

TOUCHDOWN XP Liquid Herbicide plus BANVEL II

For control of Canada thistle and perennial sow thistle in summerfallow or in post harvest stubble, apply 1.4 L/ha of TOUCHDOWN XP Liquid Herbicide plus 1.25 L/ha BANVEL II in 100-200 L/ha of clean water. An adjuvant such as FRIGATE or ENHANCE must be added for use

with this tank mixture.

For best results in summerfallow, cultivate in the spring and apply when majority of thistles are 15 cm to 25 cm tall and before the bud stage. Cultivate 3 weeks after application.

In post harvest stubble, apply this tank mixture to actively growing thistles at least 2 weeks prior to a killing frost.

NOTE: Grow only cereals, canola (including rapeseed), soybeans, field corn, sweet corn, or white beans after application of this mixture.
If application is made after September 1st, or if soil moisture levels are extremely low after application, crop injury may occur in the spring following application.

TOUCHDOWN XP Liquid Herbicide plus PURSUIT

TOUCHDOWN XP Liquid Herbicide plus PURSUIT, can be applied prior to or after seeding, but before crop emergence in soybeans. TOUCHDOWN XP Liquid Herbicide will control emerged weeds listed on this label when applied as directed (refer to Annual and Perennial Weed control sections in the TOUCHDOWN XP Liquid Herbicide product label). PURSUIT will control weeds germinating from seed. Add the recommended rates of both products in 100 L/ha of water following the instructions on the PURSUIT Herbicide label.

ONLY SOYBEANS, FIELD CORN, SPRING BARLEY, SPRING WHEAT AND WINTER WHEAT MAY BE PLANTED THE SEASON FOLLOWING A PURSUIT APPLICATION. WINTER WHEAT MAY BE PLANTED THE SAME YEAR AS A PURSUIT APPLICATION TO SOYBEANS, BUT NOT EARLIER THAN 120 DAYS AFTER THE APPLICATION.

DO NOT APPLY AFTER CROP EMERGENCE.

TOUCHDOWN XP Liquid Herbicide plus Metribuzin (SENCOR 75DF)

For burn down and residual control of selected annual weeds in soybeans taller than 4 cm, apply 1.0 L/ha of TOUCHDOWN XP Liquid Herbicide in tank mix with SENCOR 75 DF as a preplant surface (up to 30 days before planting) or pre-emergence application. Application must be made before crop emergence.

TOUCHDOWN XP Liquid Herbicide plus DUAL[®] II Magnum[®] and/or DUAL Magnum

For burndown and residual control of selected annual weeds in soybeans and corn.

In soybeans, apply TOUCHDOWN XP Liquid Herbicide in tank mix with 1.15 - 1.75 L/ha of DUAL Magnum as a preplant surface (up to 30 days before planting) or pre-emergence application.

In corn, apply TOUCHDOWN XP Liquid Herbicide in tank mix with 1.25 – 1.75 L/ha of DUAL II Magnum as a preplant surface (up to 30 days before planting) or pre-emergence application.

NOTE: The use on corn is for EASTERN CANADA ONLY.

Application must be made before crop emergence.

Perennial weeds such as quackgrass may not be controlled with lower rates of TOUCHDOWN

XP Liquid Herbicide. Use higher rates of TOUCHDOWN XP Liquid Herbicide if perennial weeds are present.

TOUCHDOWN XP Liquid Herbicide plus BROADSTRIKE DUAL

BROADSTRIKE DUAL at 2.4 L/ha may be tank mixed with TOUCHDOWN XP Liquid Herbicide at 2.0 L/ha for control of existing annual weeds and certain perennial weeds including quackgrass. This tank mix may be applied surface preplant or pre-emergence in minimum till or no-till conditions. When mixing, add the BROADSTRIKE DUAL component first.

TOUCHDOWN XP Liquid Herbicide plus FRONTIER®

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus FRONTIER® after seeding but before crop emergence on corn and soybeans. For more information on weeds controlled and rates follow the label directions for TOUCHDOWN XP Liquid Herbicide and FRONTIER®.

TOUCHDOWN XP Liquid Herbicide plus DUAL II Magnum/DUAL Magnum

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus DUAL II Magnum/DUAL Magnum after seeding but before crop emergence on corn and soybeans. For more information on weeds controlled and rates follow the label directions for TOUCHDOWN XP Liquid Herbicide and DUAL II Magnum/DUAL Magnum.

TOUCHDOWN XP Liquid Herbicide plus FIELDSTAR®

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus FIELDSTAR® after seeding but before crop emergence on corn. For more application details follow the label directions for TOUCHDOWN XP Liquid Herbicide and FIELDSTAR®.

TOUCHDOWN XP Liquid Herbicide plus Linuron

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus linuron after seeding but before crop emergence on corn and soybeans. For more information on weeds controlled and rates follow the label directions for TOUCHDOWN XP Liquid Herbicide and linuron products (AFOLAN® F, LINURON® 480, LOROX® DF, LOROX® DF TOSS'N GO, LOROX® L).

TOUCHDOWN XP Liquid Herbicide plus PRIMEXTRA® II Magnum

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus PRIMEXTRA® after seeding but before crop emergence on corn. For more application details follow the label directions for TOUCHDOWN XP Liquid Herbicide and PRIMEXTRA II Magnum.

TOUCHDOWN XP Liquid Herbicide plus PROWL®

For burndown and residual control of selected annual weeds apply TOUCHDOWN XP Liquid Herbicide plus PROWL® after seeding but before crop emergence on corn. For more information on

weeds controlled and rates follow the label directions for TOUCHDOWN XP Liquid Herbicide and PROWL®.

Forage Legumes & Grasses

To control emerged vegetation prior to emergence of legumes and grasses. If legumes and grasses are to be underseeded with a cover crop, TOUCHDOWN XP Liquid Herbicide must be applied prior to planting any cover crop.

Pasture Renovation

To control or suppress existing vegetation for zero-tillage seeding of legumes into established sod for renovation. Vegetation should be at least 20 cm in height with maximum number of seedlings and shoots emerged. Apply before or after seeding but before crop emerges.

Forage Seed Productions (For spot treatment)

To control perennial weeds such as quack grass and Canada thistle in seed fields. Apply to weeds at least 20 to 25 cm in height and before emergence of seed head. **The crop in the treated area will be destroyed.** Avoid drift outside of treated area.

PRE-HARVEST APPLICATION IN WHEAT, BARLEY, CANOLA, PEAS, SOYBEAN, DRY BEANS, FLAX (including low linolenic acid varieties), LENTILS AND OATS.

For control of quackgrass, Canada thistle, common milkweed and season long control of perennial sow thistle. TOUCHDOWN XP Liquid Herbicide can be applied prior to harvest of wheat, barley, canola, peas, soybean, dry beans, flax (including low linolenic acid varieties), lentils and oats. DO NOT apply to crops, if grown for seed production.

This treatment may also provide harvest management benefits, by drying down crop and weed vegetative growth, for example, where late flushes of annual weeds, green vegetative crop growth, or late tillering may interfere with harvest operations. **EXTREMELY COOL, WET AND/OR CLOUDY WEATHER CONDITIONS BETWEEN THE TIME OF APPLICATION AND THE ANTICIPATED HARVEST DATE MAY SLOW DOWN ACTIVITY OF THIS PRODUCT, THEREBY DELAYING CROP DRYDOWN AND HARVEST DATE.**

TOUCHDOWN XP Liquid Herbicide should be applied pre-harvest at 1.875 L/ha in 50 to 100 L/ha of clean water, by ground application only. Apply only when the crop has 30% or less grain moisture content. This stage typically occurs 7 to 14 days before harvest. Consult the following table for visual indicators of this stage in each crop. For the best weed control results quackgrass should be actively growing and have at least 4 to 5 green leaves. Canada thistle and perennial sow thistle should be actively growing and at or beyond the bud stage for best results. Applications for weed control (not for harvest management) must be made at the correct stage of both weed and crop growth.

Apply only during the period 7-14 days before harvest to ensure best weed control and to maximize harvest management benefits. Earlier application may reduce crop yield and/or quality, and may lead to excess glyphosate residues in the crop.

Grain, grain fractions and meal from treated crops may be fed to livestock. No other portions of the treated crop should be fed to livestock.

Overspray or drift to important wildlife habitats such as bodies of water, wetlands (eg. sloughs),

shelterbelts, woodlots and other cover on the edges of fields frequented by wildlife, should be avoided.

Do not expose or contaminate any body of water or non target vegetation by direct application, spray drift or when cleaning and rinsing spray equipment.

DO NOT APPLY BY AIRCRAFT.

TABLE 1: Guidelines for Timing of Pre-harvest Applications

<u>CROP(S)</u>	<u>VISUAL SYMPTOMS</u> <u>(grain moisture is less than 30%)</u>
Wheat	Hard dough stage; thumbnail impression remains on the seed.
Barley	Hard dough stage; thumbnail impression remains on the seed.
Canola	Pods are green to yellow; most seeds are yellow to brown.
Peas	Majority (75%-80%) of pods are brown.
Soybeans	Stems are green to brown in colour, pod tissue is dry and brown in appearance: 80% - 90% leaf drop.
Dry Beans	Stems are green to brown in colour; pods are mature (yellow to brown in colour), 80%-90% leaf drop (original leaves).
Flax (including low linolenic acid varieties)	Majority (75%-80%) of bolls are brown.
Lentils	Lowermost pods (bottom 15%) are brown and rattle
Oats	Hard dough stage; thumbnail impression remains on the seed.

Tree, Vine and Berry Crops

To control annual and perennial weeds in established vineyards, or orchards, or for site preparation prior to transplanting tree and vine crops.

Use boom sprayer, shielded sprayers, hand held guns, or wiper, roller or wick applicators (The latter three are for use only in orchards or vineyards).

Repeat applications may be necessary as new seedlings emerge or underground parts of untreated weeds emerge.

DO NOT APPLY MORE THAN 26 L OF TOUCHDOWN XP LIQUID HERBICIDE PER YEAR. EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF TOUCHDOWN XP LIQUID HERBICIDE SOLUTION, SPRAY DRIFT, OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT, OR OTHER PARTS OF TREES OR VINES. CONTACT OF TOUCHDOWN XP LIQUID HERBICIDE WITH ANY OTHER THAN MATURED

BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

Allow mowed weeds time to regrow to recommended growth stage for treatment.

WEED CONTROL IN TREE, VINE and BERRY CROPS

Crop	Rate (L/ha)	Pre-Harvest Interval (days)	Max. App. per year	Weed Controlled	Comments
Apples, Apricot, Cherry (Sweet/Sour), Peaches, Pears, Plums	1.7-9 (directed spray)	30	3	Annual and perennial weeds	Apply as directed spray with no more than 275 kPa.
Grapes	1.7-9 (directed spray)	14	3	Annual and perennial weeds	Remove all sucker growth from the spray zone before spraying, except for the Concord variety of grape. Suckering should be conducted within 2 weeks prior to application. Do not apply to vines which have been established less than 3 years.
Highbush (cultivated) Blueberry	2.1-4.2 (directed spray)	30	1	Quack-grass	Use as a directed spray, with no more than 275 kPa pressure.
Lowbush Blueberry	0.75-1.5% solution (spot treatment)	Apply in non-bearing year only	1	Wood brush	Apply as directed spray in mid-summer of the vegetative (non-bearing) year. See Agricultural Use section in booklet for instructions on spot treatments.
Filberts Hazelnut (established plantations)	1.9-2.6 (directed spray)	14	-	Annual weeds	Use as a directed spray with no more than 275 kPa pressure.
Walnut Chestnut Japanese heartnut	1.7-9 (directed spray)	-	2	Annual and perennial weeds	Apply late spring and fall post-harvest but prior to a killing frost. Apply in 200-300 L water as a directed spray using no more than 275 kPa pressure. Apply alternatively as a 1.5% wiper solution. See Application equipment section in booklet for instructions on wiper application.

Crop	Rate (L/ha)	Pre-Harvest Interval (days)	Max. App. per year	Weed Controlled	Comments
Cranberry	15% Solution (0.75 L TOUCHDOWN XP Liquid Herbicide + 4 L water)	50	1	Annual and perennial weeds	Apply using wick or wiper applicators. See Application equipment section for instructions on wiper applications.
Strawberry	0.75-1.5% solution (spot treatment) 25% solution (wiper application)	30	1	Emerged perennial weeds	Apply when weeds are at a susceptible growth stage. See Agricultural Use section for instructions on spot treatments. See Application Equipment section for instructions on wiper applications.
Sugar beets	0.75-1.5% solution (spot treatment)	Treated crop MUST NOT be harvested	1	Dodder species	Apply when dodder is vigorously growing but before flowering. See Agricultural Use section for instructions on spot treatments.

APPLICATION EQUIPMENT (and Mixing, Application Instructions).

BOOM (Ground Boom) and BOOMLESS Equipment:

Mixing

For field or industrial type sprayers, fill the spray tank with one half the required amount of water. Add the proper amount of TOUCHDOWN XP Liquid Herbicide and adjuvant (See Use Rate Table) and mix well before adding the remaining portion of water. Placing the filling hose below the surface of the liquid solution will prevent any excessive foaming. Remove the hose from tank immediately after filling to avoid back siphoning into water source (A one-way valve should be installed to prevent back siphoning). Use of mechanical agitators may cause excessive foaming. By-pass lines should terminate at the bottom of the tank.

Application

Use flat fan nozzles in boom sprayers. To control perennial weeds, apply TOUCHDOWN XP Liquid Herbicide in 50 to 300 L of water per hectare as a broadcast spray. Use no more pressure than 275 kPa.

To control annual weeds as listed, apply TOUCHDOWN XP Liquid Herbicide in 50 L to 100 L of water per hectare as a broadcast spray. Use no more pressure than 275 kPa.

KNAPSACK SPRAYERS HAND HELD & HIGH VOLUME EQUIPMENT

High volume spraying utilizes handguns or other suitable nozzle arrangements to apply a directed spray to weeds. Use coarse sprays only.

Mixing

Mix the proper amount of TOUCHDOWN XP Liquid Herbicide and adjuvant with water in a larger container. Fill the sprayer with the mixed solution.

Unless otherwise stated, make a 0.75% solution of TOUCHDOWN XP Liquid Herbicide in water (0.75 L of TOUCHDOWN XP Liquid Herbicide in 100 L of water). A 1.5% solution (1.5 L of TOUCHDOWN XP Liquid Herbicide in 100 L of water) should be used on harder to control perennials.

Application

Spray coverage should be uniform and complete. Apply on a spray-to-wet basis. Do not spray to the point of run-off. Hand gun application should be properly directed to avoid spraying desirable plants.

WIPER, WICK AND ROLLER EQUIPMENT

These applicators apply TOUCHDOWN XP Liquid Herbicide solution directly onto the weeds by contacting the weed with an absorbant material containing the Herbicide solution. The weeds must be above any desired vegetation to prevent contact with the desired vegetation.

Mixing

Mix the proper amount of TOUCHDOWN XP Liquid Herbicide and adjuvant with water in a larger container. Use this mixed solution in the wiper, wick or roller equipment.

Application

These applicators can be used to control weeds in:

- the following agricultural crops:
apple, cherry, peach, apricot, pear and plum orchards, grape vineyards and cranberries.

The applicator should be adjusted so that the contact point of the wiper, roller or wick is at least 5 cm above the desirable vegetation. Droplets or foam of the TOUCHDOWN XP Liquid Herbicide solution settling on desirable vegetation may result in discolouration, stunting or destruction.

Weeds should be a minimum of 15 cm above the desired vegetation.

Best results may be obtained if two applications are made in opposite directions where possible. Otherwise, best results may be obtained when more of the weed is exposed to TOUCHDOWN XP Liquid Herbicide solution.

Weeds not contacted will not be affected. This may occur in dense clumps, severe infestation, or when the height of the weeds varies so that not all weeds are contacted. In these instances, a repeat treatment may be necessary.

AVOID CONTACT WITH DESIRABLE VEGETATION

Application Notes:

- * Maintain wiper equipment in good operating condition. Care must be taken with all types of wipers to ensure that the absorbent material does not become over saturated, causing the Herbicide to drip onto desirable vegetation.
- * Avoid leakage or dripping onto desirable vegetation.
- * Adjust height of wiper applicator to ensure proper contact with weeds.
- * Keep wiping surfaces clean.
- * Maintain recommended roller speed on roller applicators while in use.
- * DO NOT use wiper equipment when weeds are wet.
- * DO NOT operate equipment at ground speeds below 4 and greater than 10 km/h. Weed control may be affected by speed of application equipment. As weed density increases, reduce equipment ground speed to ensure good coverage of weeds.
- * Be aware that on sloping ground the Herbicide solution may migrate, causing dripping on the lower end and drying on the upper end of the wiper applicator.
- * Variation in equipment design may affect weed control. With wiper applicators, the wiping material and its orientation must allow delivery of sufficient quantities of the recommended TOUCHDOWN XP Liquid Herbicide solution directly to the weed.
- * Mix only the amount of solution to be used during a one day period, as reduced activity may result from use of leftover solution. Thoroughly drain and clean all equipment immediately after use.

USE RATES

Results are best when weeds are actively growing. If weeds have been mowed, allow to return to optimum growth stages.

Delay application until vegetation has emerged to the stages described for control of such vegetation under the Annual and Perennial Weed Control tables of this booklet to provide adequate leaf surface to receive the spray. Un-emerged plants arising from underground rhizomes or root stocks of perennials will not be affected by the spray and will continue to grow.

For this reason best control of most perennial weeds is obtained when treatment is made at late growth stages approaching maturity.

Always use the higher rate of TOUCHDOWN XP Liquid Herbicide per hectare within the recommended range when weed growth is heavy or dense or weeds are growing in an undisturbed (non-cultivated) area.

Do not treat weeds under poor growing conditions such as drought stress, disease or insect damage as reduced weed control may result.

ADJUVANTS

The use of an adjuvant (surfactant or wetting agent) is required for effective use of TOUCHDOWN XP Liquid Herbicide. The adjuvant must be cationic. Use one or a combination of the adjuvants listed in table to the amount specified.

Adjuvant	Type	Amount of Adjuvant per 100 Litres of Spray Mixture Unless Otherwise Stated		
		All Uses Except	Longer Term Quackgrass Control	Longer term Quack Grass Control
FRIGATE®	cationic	Use one or a combination of the adjuvants at the rate of 500 mL per 100 L (0.5% v/v) of spray mixture.		Use one or a combination of the adjuvants at the rate of 1000 mL(1L) per 100 L (1%v/v) of spray mixture.
ENHANCE®	cationic			Use 500 mL per ha in mixture with TOUCHDOWN XP Liquid Herbicide where Quack Grass rate is stated as 2 L/ha. Use water volumes of 100 to 200 L/ha.

Heavy rainfall immediately after application may wash the chemical off the foliage and a repeat application may be required. Do not apply if rainfall is forecasted for the time of application.

Do not mix with any surfactant, pesticide, herbicide oils or any other material other than water unless specified in this booklet. For best results, spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

ANNUAL WEED CONTROL

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Volume L/ha	Comments (Refer to section on ADJUVANTS for required amount of adjuvant)
Boom or Boomles	Wild oats, green foxtail, volunteer cereals, volunteer canola, wild mustard, lady's thumb, stinkweed.	Weeds up to 8 cm in height	0.56	50-100	For wild oats apply at 1-3 leaf stage. For heavy wild oat infestations use 0.75 L/ha Summer fallow use only.
Boom or Boomless	All annual grasses listed above plus foxtail barley* (suppression only) All annual broad leaved weeds listed above plus flixweed** and kochia**	Weeds 8 cm to 15 cm	0.75	50-100	*Apply before initiation of seed-head or senescence of the lower leaves. **Suppression only. Refer to higher rates of this table or tank mix table for control options. Summer fallow use only.
Boom or Boomless	All annual grasses listed above plus Downey brome, giant foxtail and Persian dandelion All annual broadleaved weeds listed above plus lamb's-quarters, redroot pigweed, hempnettle, flixweed, russian thistle, volunteer flax, common ragweed*, Canada fleabane*, wild buckwheat**, narrow-leaved hawk's beard***	Weeds up to 15 cm in height	0.94-1.4	50-100	For tank mix weed control see Tank Mix chart. * DO NOT use these rates on plants greater than 8 cm in height. ** For 3-4 leaf stage use 1.4 L/ha rate. *** For weeds 8 cm to 15 cm in height use 1.4 L/ha
	All annual grasses listed above plus crab grass and annual blue grass. All annual broadleaved weeds listed above plus kochia, prickly lettuce, shepherd's purse, annual sow thistle, and narrow-leaved vetch.	Weeds up to 15 cm in height	1.7	50-100	* For additional annual broadleaved weed control options, refer to Tank Mix chart.
	All annual grasses and broadleaved weeds listed above.	Weeds over 15 cm in height	2.6	50-100	* For additional annual broadleaved weed control options, refer to Tank Mix chart.
Wipers and Wicks	Green foxtail, wild oats, volunteer barley, volunteer corn, lamb's quarters.	Weeds to be at least 15 cm above desirable vegetation	0.75	2	This mixture is a 25% solution. Contact point for wiper or wick must be at least 5 cm above desirable vegetation. In severe weed infestations, reduce ground speed to ensure adequate control. See Application Equipment section for instructions on wiper and wick application.
Rollers	Green foxtail, wild oats, volunteer barley, volunteer corn, lamb's quarters.	Weeds to be at least 15 cm above desirable vegetation	0.38 to 0.75	10	This mixture is a 3.75-7.5% solution. Roller speed 50-150 rpm. See Application Equipment section for instructions on roller application.

ANNUAL WEED CONTROL TANK MIXTURES FOR SUMMERFALLOW

TANK MIXTURES	RATE L/ha	WEEDS CONTROLLED ¹	WATER ³ VOLUME L/ha	COMMENTS
TOUCHDOWN XP Liquid Herbicide + BANVEL® II	0.56-0.75 + 0.29	Volunteer cereal, wild oats, green foxtail. Volunteer canola (rapeseed), wild mustard, flixweed*, lamb's quarters, lady's thumb, stinkweed, kochia, russian thistle, cow cockle, redroot pigweed**, wild buckwheat**.	50-100	Weeds should be less than 15 cm tall and actively growing for best results. Use higher rate if weeds are beyond 8 cm in height. *TOUCHDOWN XP Liquid Herbicide applied at 0.75 L/ha rate only. **Suppression only. See other tank mixtures for control options.
TOUCHDOWN XP Liquid Herbicide + 2,4-D Amine ²	0.56-0.75 + 1.2	Volunteer cereals, wild oats* and green foxtail*, volunteer canola (rapeseed), wild mustard, flixweed, redroot pigweed, lady's-thumb, stinkweed, kochia. Lamb's quarter**, russian thistle**.	50-100	Weeds should be less than 15 cm tall and actively growing for best results. Use higher rate if weeds are beyond 8 cm in height. * Use TOUCHDOWN XP Liquid Herbicide at 0.75 L/ha rate only for wild oat and green foxtail control. **Suppression only. See other tank mixtures for control options.
TOUCHDOWN XP Liquid Herbicide + PARDNER®	0.56-0.75 + 1.25	Volunteer cereals, green foxtail, volunteer canola (rapeseed), wild mustard, lady's thumb, stinkweed, wild buckwheat,* redroot pigweed**, kochia**, wild oats**	50 - 100	This tank mix is registered for use in summerfallow and prior to wheat, barley and oats in minimum tillage systems. Weeds should be less than 15 cm tall and actively growing for best results. Use the higher rate if weeds are beyond 8 cm in height * Use TOUCHDOWN XP Liquid Herbicide at 0.75 L/ha rate only for wild buckwheat control. **0.75 L rate, suppression only. See other tank mixtures for control options.

¹ For foxtail barley suppression, refer to "Annual Weed Control" table.

² 0.56 kg ai/ha of 2,4-D. Adjust rates accordingly for other 2,4-D formulations.

³ Add required amount of adjuvant.

PERENNIAL WEED CONTROL

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Volume L/ha	Comments
Boom or Boomless	Field Bindweed	Full bloom or beyond	5.3 to 9	100 to 300	Allow 7 days or more after application before tillage.
	Common Milkweed	Bud to full bloom for most shoots	9	100 to 300	Spot treatment rate is 90 mL per 5 L water/100 m ² and spray to wet not runoff. Reduced results may occur if sprayed after full bloom. Repeat Treatment may be required. Allow 7 days or more after application before tillage.
	Quack Grass Spring Application (no fall tillage)	3 to 4 green leaves (approx. 20 cm high)	1.9	50 to 300	Season long control. At higher water volumes use approved surfactant at 0.5% v/v (0.5 L per 100 L water). Allow 3 days after application before tillage.
	Spring application (Fall-tilled land)	4-5 green leaves (approx. 20 cm high)	1.9	50 to 100	Season long control Apply in spring prior to seeding. Growth stage usually reached 1 to 4 weeks later on land that has been fall-tilled. Reduced control may result on land tilled deeper than 15 cm.

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Volume L/ha	Comments
Boom or Boomless	Fall Application (After harvest)	3-5 green leaves (approx. 20 cm high)	1.9	50 to 300	For season long control the following year. Do not till between harvest and application. Allow 5 days or more after application before tillage.
			1.9-5.3	50 to 300	LONG TERM CONTROL Reduced control may result if rhizomes have become dormant due to poor sod or land has not been tilled for several years. Treatment after a mild frost is possible if 3-4 leaves are still green and actively growing but not after a heavy frost. Straw should be removed or evenly spread to allow re-growth and adequate spray coverage.
Boom and Boomless	Canada Thistle	Bud stage or beyond	3.6 to 5.3	100 to 300	Allow 5 days after application before tillage.
		Rosette stage (summerfallow)	1.9	50 to 100	Heavy frost prior to application may decrease control. Ensure proper growth stage by performing last summerfallow tillage between July 5 and August 1st. Allow re-growth for minimum of 5 weeks to reach rosette stage and a minimum of 15 cm in diameter. Allow 10 days after application before tillage. Treatment after mild frost is possible if leaves are still green and actively growing but not after heavy damaging frost.

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Volume L/ha	Comments
Boom or Boomless	Wire stemmed muhly, alfalfa, broadleaved plantain, Canada goldenrod, horsetail, mouse-eared chickweed, sheep's sorrel, wild grape.		1.7-3.3	100-300	Use higher rate for weeds beyond 8 cm in height or in heavy weed infestation. Allow 7 days after application before tillage.
	Common redtop, orchard grass, colt's foot, dandelion, grass leaved stitchwort, Jerusalem artichoke, roundleaved mallow, smooth bedstraw, stork's bill, white clover, wild carrot.		3.3-5.3	100-300	Use higher rate for weeds beyond 8 cm in height or in heavy weed infestation. Allow 7 days after application before tillage.
Boom or Boomless	Other Perennial Weeds	Early heading or early bud stage (Seed Weed Controlled Section)	5.3-9	100-300	Use higher rate for weeds beyond 8 cm in height or in heavy weed infestation. Allow 7 days after application before tillage. TOUCHDOWN XP Liquid Herbicide rate is equivalent to 53-90 mL/100 m ²
Wipers and Wicks	Canada Thistle, milkweed, quackgrass, cottontop	Weeds to be at least 15cm above desirable vegetation.	0.75	2	See Application Equipment section for instructions on Wiper and Wick Application.
Rollers	Canada Thistle, milkweed, quackgrass, cottontop	Weeds to be at least 15cm above desirable vegetation.	0.38 L to 0.75	10	This mixture is a 3.8-7.5% solution. See Application Equipment section for instructions on Roller Application. This treatment will only suppress perennial weeds contacted. Roller speed 50-150 rpm.

NOTE TO USER: READ THE FOLLOWING BEFORE USING THIS PRODUCT FOR THE INDICATED SPECIAL USE APPLICATIONS (NORTH AMERICAN GINSENG):

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than Syngenta Crop Protection Canada, Inc. and accepted for registration by Health Canada under the User Requested Minor Use Label Expansion program. Syngenta Crop Protection Canada, Inc. itself makes no representation or warranty with respect to performance (efficacy) and/or crop tolerance (phytotoxicity) claims for this product when used on the crop(s) listed below.

Accordingly, the Buyer and User assume all risks related to performance and crop tolerance arising, and agree to hold Syngenta Crop Protection Canada, Inc. harmless from any claims based on efficacy and/or phytotoxicity in connection with the use(s) described below.

DIRECTIONS FOR USE

ALWAYS REFER TO THE RESPECTIVE PRODUCT LABEL FOR FURTHER INFORMATION ON WEEDS CONTROLLED, APPLICATION DIRECTIONS, AND USE PRECAUTIONS.

DO NOT APPLY TOUCHDOWN XP LIQUID HERBICIDE BY SPOT SPRAYING, WIPING, WICKING, ROLLING OR PAINTING (ie application with a paint brush).

NORTH AMERICAN GINSENG

NEW GARDENS (BRITISH COLUMBIA ONLY): Apply TOUCHDOWN XP liquid herbicide in the fall after seeding but before freeze-up in new gardens only, to control volunteer grain. Apply when weeds are at the growth stage described on the label. Use one application at 1.875 L in 50 to 100 L of water per ha. **DO NOT EXCEED RATE OR SPRAY VOLUMES OR CROP INJURY MAY RESULT. TOUCHDOWN XP liquid herbicide is a non-selective herbicide and may cause crop damage if in contact with actively growing ginseng foliage. DO NOT USE A FALL APPLICATION IN EXISTING/ESTABLISHED GARDENS.**

EXISTING/ESTABLISHED GARDENS: Apply TOUCHDOWN XP liquid herbicide in the spring before the crop has emerged above the soil. Apply when weeds are at the growth stage described on the label. Use one application at 1.875 L in 50 to 100 L of water per ha. **DO NOT EXCEED RATE OR SPRAY VOLUMES OR CROP INJURY MAY RESULT. TOUCHDOWN XP liquid herbicide is a non-selective herbicide and may cause crop damage if in contact with actively growing ginseng foliage. DO NOT USE A FALL APPLICATION IN EXISTING/ESTABLISHED GARDENS.**

Resistance-Management Recommendations

For resistance management, TOUCHDOWN XP Liquid Herbicide is a Group 9 herbicide. Any weed population may contain or develop plants naturally resistant to TOUCHDOWN XP Liquid Herbicide and other Group 9 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field.

Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of TOUCHDOWN XP Liquid Herbicide or other Group 9 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact Syngenta Crop Protection Canada, Inc. company representatives at 1-800-459-2422 (in Eastern Canada) or 1-800-665-9250 (in Western Canada) or at www.syngenta.ca.

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09-JUL-2003

SUPPLEMENTAL LABEL

GROUP 9 HERBICIDE

TOUCHDOWN® XP Liquid Herbicide
(without adjuvant)

AGRICULTURAL

For pre-harvest use in flax (including low linolenic acid varieties), lentils and oats.

For Control of Annual and Perennial Grasses and Broadleaf Weeds

GUARANTEE:

Glyphosate 440 g/L acid equivalent
..... (present as 640 g/L trimethylsulfonium salt)

**READ THE LABEL BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

WARNING



POISON

**CAUTION: EYE IRRITANT
POTENTIAL SKIN SENSITIZER**

REGISTRATION NO. **24318**
PEST CONTROL PRODUCTS ACT

Syngenta Crop Protection Canada, Inc.
140 Research Lane
Research Park, University of Guelph
Guelph, ON N1G 4Z3

NOTICE TO USER

This control product is to be used only in accordance with the directions on this label. It is an offence under the Pest Control Products Act to use a control product under unsafe conditions.

NOTICE TO BUYER

Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.

FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, IMMEDIATELY dilute by swallowing water or milk. Call a physician or contact a poison control centre.

If in eyes, flush IMMEDIATELY with plenty of water for at least 15 minutes. Call a physician or contact a poison control centre.

If on skin, flush with plenty of water. Remove any contaminated clothing and wash separate from house laundry before reuse. If irritation develops, contact a physician.

TOXICOLOGICAL INFORMATION

Treat symptomatically if ingested or if contact is made with eyes or skin.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

1. **When handling the concentrate:**
 - * Wear a long sleeve shirt and long pants or coveralls, chemical resistant gloves and eye protection.
 - * Wash splashes from skin and eyes immediately with plenty of water.
2. **When spraying:**
 - * Wear a long sleeve shirt and long pants or coveralls.
 - * Avoid working in spray mist.
 - * Avoid all drift or contact with other vegetation. See ENVIRONMENTAL HAZARDS
3. **After spraying:**
 - * Wash hands and shower thoroughly.

4. As with all agrochemical products:

- * When using, do not eat, drink or smoke.
- * Wash hands and exposed skin with soap and water thoroughly before eating, drinking or smoking.
- * Wash out container thoroughly, empty washings into spray tank and dispose of safely. See DISPOSAL statement.
- * Keep away from food, drink and animal feeding stuffs.
- * Do not contaminate ponds, waterways or ditches with chemical. See ENVIRONMENTAL HAZARDS.
- * Store in original container, tightly closed, in a safe place.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in U.S., contact 1-866-375-4648 or www.cropro.org.

STORAGE

Always store in original container with top closed.

Avoid contamination of seed, feed and foodstuffs.

Product is not affected by freezing.

SPILL CLEANUP

Observe safety and protective measures as noted under PRECAUTIONS.

Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays (kitty litter, etc.) Collect contaminated absorbent, place in plastic lined metal drum and dispose of in accordance with instructions provided under DISPOSAL. Thoroughly scrub floor or other impervious surfaces with a strong industrial type detergent solution and rinse with water.

Liquid spills that soak into the ground should be dug-up, placed in **plastic-lined metal** drums and disposed of in accordance with instructions provided under DISPOSAL.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a **plastic-lined drum** or other non-leaking container and disposed of by use according to label directions or in accordance with instructions provided under DISPOSAL. Any recovered spilled liquid should be similarly collected and disposed of according to DISPOSAL statement.

DECONTAMINATION AND DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

CONTAINER DISPOSAL:**FOR DISPOSAL OF PLASTIC JUGS:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

FOR REFILLABLE CONTAINERS:

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

If the container is not being refilled, refer to the section "FOR DISPOSAL OF PLASTIC JUGS".

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING
CALL 1-800-327-8633 (FASTMED)***

DIRECTIONS FOR USE**PRE-HARVEST USE**

For control of quack grass, Canada thistle, common milkweed and season long control of perennial sow thistle. TOUCHDOWN XP Liquid Herbicide can be applied prior to harvest of flax (including low linolenic acid varieties), lentils and oats. DO NOT apply to crops, if grown for seed production.

This treatment may also provide harvest management benefits, by drying down crop and weed vegetative growth, for example, where late flushes of annual weeds, green vegetative crop growth, or late tillering may interfere with harvest operations. EXTREMELY COOL, WET AND/OR CLOUDY WEATHER CONDITIONS BETWEEN THE TIME OF APPLICATION AND THE ANTICIPATED HARVEST DATE MAY SLOW DOWN ACTIVITY OF THIS PRODUCT, THEREBY DELAYING CROP DRYDOWN AND HARVEST DATE.

TOUCHDOWN XP Liquid Herbicide should be applied pre-harvest at 1.875 L/ha in 50 to 100 L/ha of clean water, by ground application only. Apply only when the crop has 30% or less grain moisture content. This stage typically occurs 7 to 14 days before harvest. Consult the following table for visual indicators of this stage in each crop. For the best weed control results quack grass should be actively growing and have at least 4 to 5 green leaves. Canada thistle and perennial sow thistle should be actively growing and at or beyond the bud stage for best results. Applications for weed control (not for harvest management) must be made at the correct stage of both weed and crop growth.

Apply only during the period 7-14 days before harvest to ensure best weed control and to

maximize harvest management benefits. Earlier application may reduce crop yield and/or quality, and may lead to excess glyphosate residues in the crop.

Grain, grain fractions and meal from treated crops may be fed to livestock. No other portions of the treated crop should be fed to livestock.

Over spray or drift to important wildlife habitats such as bodies of water, wetlands (eg. sloughs), shelter belts, woodlots and other cover on the edges of fields frequented by wildlife, should be avoided.

Do not expose or contaminate any body of water or non target vegetation by direct application, spray drift or when cleaning and rinsing spray equipment.

DO NOT APPLY BY AIR.

TABLE 1: Guidelines for Timing of Pre-harvest Applications

<u>CROP(S)</u>	<u>VISUAL SYMPTOMS</u> <u>(grain moisture is less than 30%)</u>
Flax (including low linolenic acid varieties)	Majority (75%-80%) of bolls are brown.
Lentils	Lowermost pods (bottom 15%) are brown and rattle
Oats	Hard dough stage; thumbnail impression remains on the seed.

ADJUVANTS

The use of an adjuvant (surfactant or wetting agent) is required for effective use of TOUCHDOWN XP Liquid Herbicide. The adjuvant must be cationic. Use one or a combination of the adjuvants listed below to the amount specified.

Adjuvant	Type	Amount of Adjuvant per 100 Litre of Spray Mixture Unless Otherwise Stated
FRIGATE® RELY®	cationic	Use one or a combination of the adjuvants at the rate of 500 mL per 100 L (0.5% v/v) of spray mixture.
ENHANCE®	cationic	

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FRIGATE is a registered trademark of Fermenta ASC Corp.

strategies should be followed.

To delay herbicide resistance:

- Where possible, rotate the use of TOUCHDOWN XP Liquid Herbicide or other Group 9 herbicides with different herbicide groups that control the same weeds in a field.
- Use tank mixtures with herbicides from a different group when such use is permitted.
- Herbicide use should be based on an IPM program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical), cultural, biological and other chemical control practices.
- Monitor treated weed populations for resistance development.
- Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment and planting clean seed.
- Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.
- For further information or to report suspected resistance, contact company representatives at 1-800-665-9250 or at www.syngenta.ca

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