

GROUP	9	14	HERBICIDE
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FLEXSTAR® GT
Herbicide

AGRICULTURAL

HERBICIDE

SOLUTION

For non-selective burndown of annual and perennial grasses and broadleaf weeds and residual control of redroot pigweed and common ragweed in glyphosate-tolerant soybeans.

FOR SALE FOR USE IN EASTERN CANADA AND THE RED RIVER VALLEY OF MANITOBA ONLY

ACTIVE INGREDIENT:

Fomesafen.....67 g/L a.e.
(as sodium salt)
Glyphosate.....271 g/L
(as diammonium salt)

Contains 1,2-benzisothiazolin-3-one at 0.004% as a preservative.

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

WARNING: EYE IRRITANT

REGISTRATION NO.: **30412**
PEST CONTROL PRODUCTS ACT

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Pamphlet

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1. NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

2. FIRST AID

IF POISONING IS SUSPECTED, call 1-800-327-8633 (FASTMED), or contact a physician or poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

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

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 centre or doctor for treatment advice.

3. TOXICOLOGICAL INFORMATION

There is no specific antidote. Treat symptomatically.

4. PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

Causes eye irritation. DO NOT get in eyes.

Wear boots with socks, a long-sleeved shirt and long pants or coveralls, chemical-resistant gloves and protective eyewear when handling the concentrate and during application (including mixing, loading, and spraying activities). Wear chemical-resistant gloves if contact with spray nozzles is necessary. Wash the outside of the gloves before removing. Wash splashes from skin and eyes **IMMEDIATELY** with plenty of water. Wash all contaminated clothing separate from household laundry and prior to reuse. Avoid working in spray mist. Avoid all drift or contact with other vegetation. After spraying, wash hands and shower thoroughly with soap and water. While using product, do not eat, drink or handle tobacco. Wash hands and exposed skin with soap and water thoroughly before eating, drinking, handling tobacco, applying cosmetics or using the toilet. Keep product away from food, drink and animal feed. Store product in original container, tightly closed and in a safe place.

DO NOT contaminate food and feed, irrigation and drinking water supplies, and aquatic habitat (such as lakes, rivers, sloughs, ponds, coulees, prairie potholes, creeks, marshes, streams, reservoirs, and

wetlands) by cleaning of equipment or disposal of wastes.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

DO NOT enter or allow worker entry during the restricted entry interval (REI) of 12 hours after application.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA / 1-877-964-3682.

5. ENVIRONMENTAL HAZARDS

TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecast.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

A 15 m buffer zone is required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

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.

6. PHYSICAL AND CHEMICAL HAZARDS

Spray solutions of FLEXSTAR® GT Herbicide should be mixed, stored and applied only in stainless steel, fibreglass, plastic and plastic-lined steel containers.

DO NOT MIX, STORE OR APPLY FLEXSTAR GT HERBICIDE OR SPRAY SOLUTIONS OF FLEXSTAR GT HERBICIDE IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. FLEXSTAR GT Herbicide or spray solutions of FLEXSTAR GT 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.

7. STORAGE CONDITIONS

Store above -10°C in the original container. Keep in original container, tightly closed, during storage. Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reach of children and animals. Keep away from fire or open flame, or other sources of heat. If frozen, allow to thaw and agitate thoroughly prior to use.

8. 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 a **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 metal 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 DECONTAMINATION AND DISPOSAL section.

9. 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 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.

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

10. PRODUCT INFORMATION

FLEXSTAR GT Herbicide may be applied pre-plant or pre-emergent to the crop in soybeans or as a post-emergence over-the-top application in glyphosate tolerant soybeans.

FLEXSTAR GT Herbicide provides burndown of many emerged annual and perennial grasses and broadleaf weeds and residual control of redroot pigweed and common ragweed in soybeans. FLEXSTAR GT Herbicide should be applied under favorable environmental conditions that promote active weed growth. Avoid application to weeds that have been subjected to certain stress conditions such as cold temperatures, excessive moisture, drought, injury from hail or from prior herbicide applications. Avoid application to glyphosate-tolerant soybeans which may have been subjected to such stress conditions. Extremely cool or cloudy weather at treatment time may slow down activity of this product and delay visual effects of control. Some bronzing, crinkling or spotting of the glyphosate-tolerant soybeans may occur, but plants normally outgrow these effects with no adverse effects on maturity or crop yield.

Moisture is necessary to activate FLEXSTAR GT Herbicide for residual weed control. Dry weather following application of FLEXSTAR GT Herbicide may reduce effectiveness.

FLEXSTAR GT Herbicide activity is unaffected by rain falling 4 hours after application.

11. DIRECTIONS FOR USE

Glyphosate is not to be applied using hand-wicking or hand-daubing methods.

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Use clean (non-turbid) water for spraying FLEXSTAR GT Herbicide. Muddy water will reduce the effectiveness of FLEXSTAR GT Herbicide. 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.

Apply using ground equipment only.

DO NOT APPLY BY AIR.

Do not apply when wind velocity is greater than 15 km/h.

Do not apply FLEXSTAR GT Herbicide to any field more often than once every two years.

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.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse classification. Boom height must be 60 cm or less above the crop or ground.

11.1 Buffer zones:

Use of the following spray methods or equipment **DO NOT** require a buffer zone: hand- held or backpack sprayer and spot treatment.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands) and sensitive aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, wetlands and estuarine/marine water bodies).

Method of application	Crop	Buffer zone (metres) required for the protection of:	
		Aquatic habitat	Terrestrial habitat
Field sprayer	Glyphosate tolerant soybeans	15	15

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

11.2 TIMING OF APPLICATION

FLEXSTAR GT Herbicide may be applied surface pre-plant (up to 7 days before planting) or pre-emergent to the crop in soybeans or as a post-emergence over-the-top application in glyphosate tolerant soybeans.

Glyphosate-tolerant soybeans are tolerant to FLEXSTAR GT Herbicide application made to plants in the 1 to 2 trifoliolate leaf stage. Apply FLEXSTAR GT Herbicide when weeds are small and actively growing. Application should be made when the main flush of weeds is complete and the majority of the weeds are at the cotyledon to 3 or 4 true leaf stage.

ANNUAL WEEDS- Burndown

Annual Grasses

Barnyard Grass
Bluegrass (annual)
Crabgrass (large, smooth)
Downy Brome
Fall Panicum
Giant Foxtail
Green Foxtail
Persian Darnel

Rye, tame
Volunteer Barley
Volunteer Corn
Wild Oats
Proso Millet
Volunteer Wheat
Yellow Foxtail

Annual Broadleaf Weeds

Chickweed, common

Cleavers
 Cocklebur
 Corn Spurry
 Cow Cockle
 Dodder
 Fleabane (Canada)
 Flixweed
 Green Smartweed
 Hairy Galinsoga
 Hemp nettle
 Kochia
 Lady's-Thumb
 Lamb's-Quarters
 Low Cudweed
 Narrow-Leaved Hawk's-Beard
 Narrow-Leaved Vetch
 Night-Flowering Catchfly
 Nightshade, Eastern black
 Volunteer canola
 Pennsylvania Smartweed
 Prickly Lettuce
 Russian Thistle
 Prostrate Knotweed
 Round-Leaved Mallow
 Shepherd's-Purse
 Smooth Pigweed
 Sowthistle (annual)
 Stinkweed
 Stork's Bill
 Volunteer Flax
 Wild Buckwheat
 Wild Mustard
 Wild Tomato
 Wormwood (Absinth)
 Velvetleaf

PERENNIAL WEEDS- Burndown

Perennial Grasses/Sedges

Blue Grass (Canada)

ANNUAL WEEDS- Residual Control

Annual Broadleaf Weeds

Ragweed (common)

Redroot Pigweed

Blue Grass (Kentucky)
 Bromegrass (smooth)
 Cattail (common)
 Foxtail Barley
 Orchard Grass
 Quack Grass
 Redtop
 Wirestem muhly
 Yellow Nutsedge

Perennial Broadleaved Weeds

Alfalfa
 Chickweed, mouse-eared
 Clover, white
 Colt's-Foot
 Cottontop
 Curled Dock
 Dandelion, common
 Field Bindweed
 Goldenrod, Canada
 Hemp Dogbane
 Hoary Cress
 Horsetail
 Jerusalem Artichoke
 Knotweed (Japanese)
 Milkweed (common)
 Plantain, broad-leaved

Perennial Broadleaved Weeds cont'd

Poison Ivy
 Purple Loosestrife
 Sheep Sorrel
 Smooth Bedstraw
 Sowthistle (perennial)
 Stitchwort, grass-leaved
 Thistle (Canada)
 Yellow Toadflax
 Wild Carrot
 Wild Grape

11.3 APPLICATION RATES

When applying FLEXSTAR GT Herbicide, it is essential to achieve good coverage and ample penetration of the foliage in order to obtain acceptable weed control. As glyphosate kills weeds by affecting the root system, visible effects may take 7 to 10 days to occur.

Do not apply more than once per season and to any field only every second year.

Under stress conditions and for larger weeds, addition of TURBOCHARGE® is required at 0.25% v/v of

spray solution.

NOTE: Always use pedigreed (i.e. certified) glyphosate tolerant soybean varieties. Soybeans which are not designated as glyphosate tolerant will be damaged or destroyed by this treatment.

DO NOT HARVEST GLYPHOSATE-TOLERANT SOYBEANS WITHIN 90 DAYS OF APPLICATION OF FLEXSTAR GT HERBICIDE.

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

Geography	Eastern Canada	Red River Valley of Manitoba
Rate of FLEXSTAR GT Herbicide	3.5 L/ha	2.1 L/ha
Rate of TOUCHDOWN TOTAL Herbicide	N/A	0.7 – 2.46 L/ha
Spray timing	Pre-plant surface (up to 7 days before planting) or pre-emergence application before crop emergence OR Early post-emergent (1-2 trifoliolate leaf stage) (glyphosate tolerant soybeans only)	Early post-emergent (1-2 trifoliolate leaf stage) (glyphosate tolerant soybeans only)
Rate of water	150 – 200 L/ha	150 – 200 L/ha
Rate of TURBOCHARGE®*	0.25% v/v	0.25% v/v
OTHER	Apply at a pressure of 210 – 420 kPa. Do not apply at pressures which exceed 420 kPa. See “Tank Mixing Instructions” below for further information.	Apply at a pressure of 210 – 420 kPa. Do not apply at pressures which exceed 420 kPa. See “Tank Mixing Instructions” below for further information. Will not provide residual control of common ragweed or redroot pigweed

* Use TURBOCHARGE only under stress conditions and for larger weeds

TANK MIXING INSTRUCTIONS:

1. Fill the spray tank with ½ the required amount of water.
2. Add TURBOCHARGE at 0.25% v/v, if required, and agitate to ensure complete mixing.
3. Fill the spray tank to ¾ the required amount of water.
4. Add FLEXSTAR GT Herbicide and agitate to ensure complete mixing.
5. Add TOUCHDOWN TOTAL Herbicide.
6. Finish filling the spray tank with water, maintaining gentle agitation.

12. ROTATIONAL CROPPING INFORMATION

FLEXSTAR GT Herbicide can remain active in the soil for several months after application and the residues of FLEXSTAR GT Herbicide present potential carry-over damage to certain crops.

Refer to the table below for a list of crops that may be seeded following an application of FLEXSTAR GT Herbicide at the recommended rate of 3.5 L/ha. Prior to seeding any crop that is not listed including

sweet corn, a field bioassay should be conducted. A field bioassay involves seeding a test strip of the crop(s) intended for production the following year and growing the crop(s) to maturity.

Crop to be Planted	Minimum Rotation Interval (Months After Last FLEXSTAR GT Herbicide Application)
Winter Wheat	4
Spring Wheat	10
Soybeans, Dry edible beans, Field Corn	10
All other crops	Bioassay

Field Bioassay: Select an area in the field previously treated with FLEXSTAR GT Herbicide which most closely approximates the soil conditions of the field as a whole. Test strips should be seeded perpendicular to the direction in which the site was sprayed using standard seeding equipment and following normal cultivation practices. Strips of sufficient length to transect several spray swaths should be seeded to the crops intended for later planting. Reliability of the bioassay results will increase with the number and length of the test strips used. A check strip in an adjacent, untreated area should also be seeded for comparison purposes.

Examine the test strips for possible germination or stand reductions and other symptoms of injury such as colour, vigour and height. Should results of the bioassay suggest that germination or plant development is affected by residues of FLEXSTAR GT Herbicide, do not seed until a future bioassay indicates that growth of the crop is normal.

13. RESISTANT-MANAGEMENT RECOMMENDATIONS

For resistance management, FLEXSTAR GT Herbicide is a Group 9 and 14 herbicide. Any weed population may contain or develop plants naturally resistant to FLEXSTAR GT Herbicide and other Group 9 or 14 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 FLEXSTAR GT Herbicide or other Group 9 and 14 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 company representatives at 1-877-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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