# (Container)

# **GF-772 Herbicide**

GF-772 Herbicide is a tallow amine free formulation, for nonselective weed and tree or woody plant control in forestry, rangeland, permanent pasture, industrial, rights-of-way, other non-cropland areas and cropland systems.

**COMMERCIAL (AGRICULTURAL and INDUSTRIAL)** 

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

**ACTIVE INGREDIENT**: Glyphosate, present as isopropylamine salt Solution 360 g/L

**REGISTRATION NO. 29588 PEST CONTROL PRODUCTS ACT** 

Net Contents 0.1 L - bulk

Albaugh, LLC 1525 NE 36th Street Ankeny, IA 50021 USA 1-800-247-8013

# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

#### PERSONAL PROTECTIVE EQUIPMENT

Airblast: Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks, shoes and protective eyewear (goggles or face shield) during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

All other application equipment: Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab and/or cockpit.

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 directions, temperature inversions, application equipment and sprayer settings.

#### PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fiberglass, plastic and plastic-lined steel containers. DO NOT MIX, STORE OR APPLY THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED STEEL OR UNLINED STEEL (EXCEPT STAINLESS STEEL) CONTAINERS OR SPRAY TANKS. This product or spray solutions of this product 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.

#### **FIRST AID**

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.

#### **TOXICOLOGICAL INFORMATION**

No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

#### AGRICULTURAL CHEMICAL

Do not ship or store with food, feeds, drugs or clothing.

#### **ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.

#### **STORAGE**

Store this product away from food or feed.

#### **DISPOSAL**

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.

#### **Returnable Containers:**

Do not reuse this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/dealer).

#### **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.

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.

**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.

# (Booklet)



# **GF-772** Herbicide

GROUP 9	HERBICIDE
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# PRECAUTIONS KEEP OUT OF REACH OF CHILDREN

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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 directions, temperature inversions, application equipment and sprayer settings.

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No specific antidote. Employ supportive care. Treatment should be based on judgment of the physician in response to reactions of the patient.

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Do not ship or store with food, feeds, drugs or clothing.

#### **ENVIRONMENTAL PRECAUTIONS**

TOXIC to aquatic organisms and non-target terrestrial plants. Observe spray 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 filter strip between the treated area and the edge of the water body.

#### STORAGE

Store this product away from food or feed.

#### **DISPOSAL**

### **Recyclable Containers:**

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#### **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.

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.

#### **GENERAL INFORMATION**

GF-772 Herbicide, a water soluble liquid, mixes readily with water for application as a foliar spray for the control or destruction of most herbaceous and woody plants. It may be applied through most standard industrial or field type sprayers after dilution and thorough mixing with water in accordance with the label instructions.

When applied as directed under conditions described, this product controls undesirable vegetation listed on this label. This product also suppresses or controls undesirable vegetation listed on this label, when applied at recommended rates for release of established coniferous species.

This product may be applied using aerial spray equipment for conifer and pasture release, and for aerial preharvest application only. See Restricted Use sections of this label for information on how to properly apply this product by air.

Treatments should not be made to trees or brush after fall leaf drop has begun.

This product moves through the plant from the point of foliage contact to and into the root system. Visible effects on trees and woody brush may not occur until 7 to 14 days. Extremely cool or cloudy weather at treatment time may slow down activity of this product and delay visual effects or control. Visible effects are a gradual wilting and yellowing of the plant which advance to complete browning of above-ground growth and deterioration of underground plant parts.

Delay application until vegetation has emerged to the stages described for control of such vegetation to provide adequate leaf surface to receive the spray. For this reason best control of most perennial herbaceous vegetation is obtained when treatment is made at late growth stages approaching maturity.

Do not treat vegetation under poor growing conditions such as drought stress, disease or insect damage as reduced vegetation control may result. Reduced results may also occur when treating vegetation heavily covered with dust.

Rainfall occurring soon after application may reduce effectiveness. Heavy rainfall within 2 hours after application may wash the product off the foliage and a repeat treatment may be required.

Do not mix with any surfactant, pesticide, herbicide oils or any other material other than water unless specified on this label.

For best results spray coverage should be uniform and complete. Do not spray weed foliage to the point of runoff.

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

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

To ensure complete perennial weed control, allow 3 to 5 days for GF-772 Herbicide to translocate into all plant parts before grazing or harvesting treated areas.

To ensure complete perennial weed control, delay tillage of treated areas at least 7 days for GF-772 Herbicide to translocate into all plant parts.

#### **DIRECTIONS FOR USE**

DO NOT enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. For non-crop areas, DO NOT enter or allow worker entry into treated areas until sprays have dried.

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.

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

<u>Field sprayer application</u>: **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.

<u>Airblast or mist blower application:</u> **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** direct spray above plants to be treated. **DO NOT** apply when wind speed is greater than 16 km/h at the application site as measured outside of the treatment area on the upwind side. For airblast applications, turn off outward pointing nozzles at row ends and outer rows.

<u>Aerial application</u>: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply when wind speed is greater than 16 km/h at flying height at the site of application. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE S572.1) coarse classification. To reduce drift caused by turbulent wingtip vortices, the nozzle distribution along the spray boom length **MUST NOT** exceed 65% of the wing- or rotorspan.

#### **USE PRECAUTIONS**

ATTENTION: AVOID CONTACT WITH FOLIAGE, GREEN STEMS, OR FRUIT OF CROPS, DESIRABLE PLANTS AND TREES SINCE SEVERE INJURY OR DESTRUCTION MAY RESULT.

APPLY THESE SPRAY SOLUTIONS IN PROPERLY MAINTAINED AND CALIBRATED EQUIPMENT CAPABLE OF DELIVERING DESIRED VOLUMES.

**AVOID DRIFT - EXTREME CARE MUST BE USED WHEN APPLYING THIS PRODUCT TO PREVENT INJURING DESIRABLE PLANTS AND CROPS**. Even minute quantities of spray drift can cause severe damage or destruction to nearby crops, plants or other areas on which treatment is not intended, or may cause other unintended consequences. Apply only in wind conditions in compliance with local and/or provincial regulations.

# DO NOT USE IN GREENHOUSES. REDUCED RESULTS MAY OCCUR IF WATER CONTAINING SOIL IS USED, SUCH AS WATER FROM PONDS AND UNLINED DITCHES.

Clean sprayer and parts immediately after using this product by thoroughly flushing with water. Do not contaminate water sources by disposal of wastes or cleaning of equipment.

**NOTE:** Use of this product in any manner not consistent with this label may result in injury to persons, animals or crops, or other unintended consequences. Keep container closed to prevent spills and contamination.

#### MIXING AND APPLICATION

This product mixes readily with water. Reduced results may occur if water containing soil is used, such as water from ponds and unlined ditches.

# **GROUND EQUIPMENT**

For ground or industrial type sprayers, fill the spray tank with one-half the required amount of water. Add the proper amount of herbicide and mix well before adding the remaining portion of water. Placing the filling hose below the surface of the liquid solution will prevent excessive foaming. Removing hose from tank immediately will avoid back siphoning into water source. Use of mechanical agitators may cause excessive foaming. Bypass lines should terminate at the bottom of the tank.

#### **Boom Equipment**

For control of perennial weeds and woody brush and trees listed on this label using conventional boom equipment-- Apply this product in 50 to 300 L of clean water per hectare as a broadcast spray using no more than 275 kPa pressure.

For control of annual weeds listed on this label using conventional boom equipment--Apply this product in 50 to 100 L of clean water per hectare as a broadcast spray, except as otherwise stated on this label using no more than 275 kPa pressure.

# **Boomless Equipment**

For control of herbaceous weeds, woody brush and trees using boomless equipment such as cluster nozzles – Apply this product in 100-350 L of clean water per hectare as a broadcast spray using no more pressure than 275 kPa.

# Hand Held and High Volume Equipment

(use coarse sprays only)

For control of weeds and woody brush and trees using knapsack sprayers or high volume spraying equipment utilizing handguns or other suitable nozzle arrangements. Unless otherwise specified, make a 1% solution of this product in water (1 litre of this product in 100 litres of water) and apply to foliage of vegetation to be controlled. For best results, use a 2% solution (2 litres of this product in 100 litres of water) on harder to control perennials such as field bindweed, hemp dogbane, milkweed and Canada thistle.

Applications should be made on a spray-to-wet basis. Spray coverage should be uniform and complete. Do not spray to point of runoff. Hand gun applications should be properly directed to avoid spraying desirable plants.

For use in knapsack sprayers, it is suggested that the proper amount of this herbicide be mixed with water in a larger container. In a 10 L backpack create a 1% to 2% solution by mixing 100 – 200 mL of GF-772 Herbicide with 10 L of water. Fill sprayer with the mixed solution.

#### **SELECTIVE EQUIPMENT**

Selective equipment such as WIPER and ROLLER applicators can be used for weed control in soy and dry beans, orchards, vineyards, cranberries, strawberries and non-crop areas.

### Wiper Applicators

This product may be applied with a wiper applicator, after dilution and thorough mixing with water, to listed weeds in soy and dry beans, grapes, orchards, cranberries and strawberry. Applications must be made before initial pod set in soy and dry beans. (It may also be used in any industrial, tree planting and non-crop site specified on this label.)

A wiper applicator applies the herbicide solution onto weeds by rubbing the weed with an absorbent material containing the herbicide solution. Wiper applicators include either roller or wick devices which physically wipe appropriate concentrations or amounts of this product directly onto the weed. Equipment must be designed, maintained and operated to prevent the herbicide solution from contacting desirable vegetation. Performance may be improved by reducing speed in areas of heavy weed infestations to insure adequate wiper saturation. Best results may be obtained if 2 applications are made in opposite directions.

**AVOID CONTACT WITH DESIRABLE VEGETATION.** Contact of the herbicide solution with desirable vegetation may result in damage or destruction. Applicators used above desired vegetation should be adjusted so that wiper contact point is at least 5 cm above the desirable vegetation. Droplets or foam of the herbicide solution settling on desirable vegetation may result in discolouration, stunting or destruction.

Applications should be made when the weeds are a minimum of 15 cm above the desirable vegetation. Best 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. This may occur in dense clumps, severe infestations, or when the height of the weeds varies so that not all weeds are contacted. In these instances, repeat treatments may be necessary. See the Weed Control tables on this label for recommended stage of growth for specific weeds.

#### **Notes**

- Maintain equipment in good operating condition. Avoid leakage or dripping onto desirable vegetation.
- Adjust height of applicator to insure proper contact with weeds.
- Keep wiping surfaces clean.
- Maintain recommended roller RPM on roller applicators while in use.
- Keep wiper material at proper degree of saturation with herbicide solution.
- 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 insure 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 herbicide solution directly
  to the weed.
- Care must be taken with all types of wipers to insure that the absorbent material does not become
  over-saturated, causing the herbicide to drip onto desirable vegetation.
- With all equipment, drain and clean wiper parts immediately after using this product, by thoroughly flushing with water.

**For Roller Applicators--**Mix 0.5 to 1.0 L of this product in 10 L water to prepare a 5 to 10% solution. Roller speed should be maintained at 50 to 150 rpm.

For Wick or other Wiper Applicators--Mix 1 litre of this product in 2 litres of water to prepare a 33% solution.

#### **WEEDS CONTROLLED**

This product controls many annual and perennial grasses, broadleaf weeds, and woody brush and trees when applied as recommended and under conditions described. For information on how to control specific weeds including herbicide rate refer to specific instructions on this label. The following is a partial list of weeds controlled:

# **ANNUAL WEEDS**

# **Annual Grasses**

Barnyard Grass Echinochloa crusgalli Blue Grass (annual) Poa annua

Crab Grass (large)
Digitaria sanguinalis
Crab Grass (smooth)

Digitaria ischaemum

Downy Brome

Bromus tectorum

Fall Panicum

Panicum dichotomiflorum

Giant Foxtail
Setaria faberii
Green Foxtail
Setaria viridis

Persian Darnel Lolium persicum Volunteer Barley Hordeum spp. Volunteer Corn

Zea Mays Volunteer Wheat

Triticum spp.
Wild Oats
Avena fatua
Wild Proso Millet
Panicum miliaceum
Yellow Foxtail
Setaria glauca

# Other Dodder

Cuscuta spp.

# **Annual Broadleaf Weeds**

Chickweed
Stellaria media
Cleavers
Galium aparine
Cocklebur
Xanthium strumarium

Corn Spurry
Spergula arvensis
Cowcockle

Saponaria vaccaria

Eastern Black Flowering Nightshade

Solanum ptycanthum Fleabane (Canada) Erigeron canadensis

**Flixweed** 

Descurania sophia Green Smartweed Polygonum scabrum Hempnettle Galeopsis tetrahit

Kochia

Kochia scoparia
Lady's-Thumb
Polygonum persicaria
Lamb's-Quarters (common)
Chenopodium album
Narrow-leaved Hawk's Beard
Crepis tectorum

Pennsylvania Smartweed

Polygonum pensylvanicum **Prickly Lettuce** 

Lactuca scariola

Ragweed (common)

Ambrosia artemisiifolia

Redroot Pigweed

Amaranthus retroflexus Round-Leaved Mallow

Malva pusilla
Russian Thistle
Salsola pestifer
Shepherd's Purse
Capsella bursa-pastoris

Smooth Pigweed
Amaranthus hybridus
Sowthistle (annual)
Sonchus oleraceus

Stinkweed
Thlaspi arvense
Storksbill

Erodium cicutarium
Volunteer Canola
Brassica spp
Volunteer Flax

Linaria spp
Wild Buckwheat

Polygonum convolvulus

Narrow-leaved Vetch Vicia angustifolia **Night-flowering Catchfly** 

Silene noctiflora

**PERENNIAL WEEDS** Perennial Grasses / Sedges Blue Grass (Canada)

Poa compressa Blue Grass (Kentucky)

Poa pratensis

**Brome Grass (smooth)** Bromus inermis Cattail (common)

Typha latifolia

**Perennial Broadleaved Weeds** 

Alfalfa Medicago spp. Cottontop

Eriophorum chamissionis

**Curled Dock** Rumex crispus Dandelion

Taraxacum officinale Field Bindweed Convolvulus arvensis **Hemp Dogbane** 

Apocynum cannabinum

**Hoary Cress** Cardaria draba

**Knotweed (Japanese)** Polygonum cuspidatum

**WOODY BRUSH AND TREES** 

Alder Alnus spp. Birch Betula spp.

Broadleaved meadowsweet<sup>††</sup>

Spiraea latifolia

Canadian rhododendron<sup>††</sup>

Rhododendron canadenses

Cedar Thuja spp. Cherry Prunus spp.

**Douglas Fir** 

Pseudotsuga spp.

Hemlock Tsuga spp. Maple Acer spp.

†Apply as a 1-2% solution.

††Suppression only.

Wild Mustard

Sinapsis arvensis Wild Tomato

Solanum triflorum

Velvetleaf

Abutilon theofrasti

**Foxtail Barley** 

Hordeum jubatum

Quackgrass

Agropyron repens

Yellow Nutsedge

Cyperus esculentus

Wire-stemmed Muhly

Muhlenbergia frondosa

Milkweed (common)

Asclepias syriaca

Poison Ivy

Rhus radicans

**Purple Loosestrife** 

Lythrum salicaria

Sow Thistle (perennial)

Sonchus arvensis

Thistle (Canada)

Cirsium arvense

Toad Flax

Linaria vulgaris

Wormwood (Absinth)

Artemisia absinthium

Mountain-fly honeysuckle

Lornica villosa

Pine

Pinus spp.

**Poplar** 

Populus spp.

Raspberry / Salmonberry

Rubus spp.

Sheep laurel†

Kalmia angustifolia

Snowberry (Western)

Symphoricarpos occidentalis

Sweet fern†

Comptonia peregrina

Willow<sup>††</sup>

Salix spp.

Withrod

Viburnum cassinoides

#### **NON-CROPLAND USES**

### DO NOT APPLY BY AIR

Unless otherwise specified under a restricted use.

# **NON-CROPLAND USES INCLUDE:**

Industrial; recreational, rights-of-way, and public areas; turf grass renovation.

# ALWAYS READ PRECAUTIONARY STATEMENTS, GENERAL INFORMATION and MIXING and APPLICATION SECTIONS PRIOR TO SPECIFIC APPLICATION INFORMATION IN ANY LABEL SECTION.

This product can be used to control annual and perennial weeds and woody brush and trees listed on this label in non-crop areas such as railroad, pipeline, highway, power and telephone rights-of-way; petroleum tank farms and pumping installations; roadsides; storage areas; lumberyards; fence rows; industrial plant sites; parking areas; school yards, parks, golf courses, other public areas; airports and similar industrial or non-crop areas.

**NOTE**: For all industrial, rights-of-way, recreational and public areas, repeat treatments may be necessary to control regeneration or new growth.

When applied as recommended under the conditions described, this product will control weeds in non-cropland areas as listed in the following table.

#### WEED CONTROL IN NON-CROPLAND AREAS WITH GF-772 HERBICIDE

	GROUND API	PLICATION			
WEEDS	BOOM APPLI	CATION	Hand Held High	COMMENTS	
	Rate <sup>†</sup> L / ha	Water Vol.† L /ha	Volume Application % Solution		
Annual grasses and broadleaves	2.25 – 3.5	50 - 100	1	Actively growing weeds	
Perennial Weeds					
Quackgrass	2.5	50 - 300	1	. Actively growing weeds . Add 0.5% v/v of a recommended surfactant	
	4.75 –7	50 - 300	2	when using water volumes greater than 150 L. Higher rate for long term control and for heavy infestations See section on purple	
Canada Thistle (Bud Stage)	4.75 – 7	100 - 300	2	loosestrife control for application instructions  Summer through fall is optimum	
Purple loosestrife	6	300-600	1 - 2 (or 33% for wiper application)		

Other Perennials	7 – 12	100 –300	2	
Brush and Trees	1 – 12	100 –300		. Summer through early fall
Birch, Cherry, Poplar, Western Snowberry, Willow	3-6	100 – 300	1 - 2	. Late Summer through fall
Maple, Raspberry/ Salmonberry, Alder	6	100 – 300	2	. Fall is optimum
Turf Renovation	2.5 – 12	100 – 300	1 - 2	. Use higher end of the rate range for perennials
Annual and Perennial Weeds				range for perefinials
Roadside Vegetation (1-2 m wide along shoulders)	1) 0.75-1 + 1.25-2.5 L	25-150	-	- Refer to annual weed control table on this label for appropriate product rate for specific weeds
Annual Weeds (refer to Tank-Mix sections on product labels for	DyCleer®48 0			- For 2,4-D amine formulations with a different guarantee, adjust the rate accordingly
specific weeds controlled)	or			- No application to standing water
	2) 0.75-1			
	0.30 L DyCleer 480			
	+ 1.2L 2,4-D Amine 500			
Residual Control Annual and Perennial Weeds	2.5 – 12 +	200-400	-	- Do not apply to coarse, sandy or gravelly soil. One application per year.
(the simazine component of this tank mixture will provide season	a) 2.5-5.6 kg Simazin e 80W			<ul> <li>Use according to the most restrictive label directions for each product in the mixture.</li> </ul>
long control of most germinating broadleaf weeds and grasses. It may also provide post-emergent activity on certain annual weeds)	or + b) 4.0-9.0 L Simadex® Flowable			- For other simazine formulations registered for industrial/non-cropland areas, use equivalent rates; i.e. 2.0-4.5 kg simazine/ha

<sup>&</sup>lt;sup>†</sup> For more information on rates, water volumes and application, refer to specific instructions on this label.

# APPLICATION INFORMATION FOR NON-CROPLAND USES Foliar Applications

Spray coverage should be uniform and complete. Do not spray to the point of run off. Do not allow spray drift to contact desirable vegetation as severe injury or destruction may occur. For woody brush and trees, early season applications may take 30-45 days for symptoms to develop on target species. Late season application may be made to species that have some autumn colours provided no major leaf drop has occurred. Control will be observed the following spring.

# EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE OF DESIRABLE TURFGRASSES, TREES, SHRUBS, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.

This product does not provide residual weed control. For subsequent weed control, follow a label approved herbicide program. Read and carefully observe the cautionary statements and all other information appearing on the labels of all herbicides used.

### **GROUND APPLICATIONS: For all non-cropland uses**

For woody brush and trees, apply 3 to 7 L of this product per hectare. Use ground boom or boomless, or mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment. Apply as directed in the recommended volume of clean water to foliage of actively growing vegetation. Use the 6 L/ha rate for Maple, Alder and Willow† species, as well as for hard to control perennial weed species. († Suppression only)

Spray coverage should be uniform and complete. Do not spray to the point of runoff. Do not allow spray drift to contact desirable vegetation as severe injury or destruction may occur. If weeds have been mowed or tilled, do not treat until regrowth has reached the recommended stages.

#### PURPLE LOOSESTRIFE CONTROL

- DO NOT TREAT PLANTS OVER OPEN WATER. GF-772 Herbicide is not registered for direct application to bodies of water.
- Treat when plants are actively growing at or beyond the bloom stage. If using hand-held equipment, sprayto-wet
- For wiper applications, see specific section on this label.
- Where feasible, remove flower heads before treatment to ensure prevention of seed set.
- For large (>1.6 ha) monocultures of loosestrife, work from the periphery inward in successive years to allow competing vegetation to invade the treated area.
- A long-term control strategy should include measures to control both established plants and seedlings.
   Sprayed areas should be monitored to determine the appropriate follow-up management. Early detection and treatment of second and third generation seedlings is important to prevent re-infestation of purple loosestrife. Desirable native plant communities will then have a chance to become re-established.

# Selective Application for All Non-Cropland Uses

Selective equipment such as **WIPER** and **ROLLER** applicators can be used to control emerged weeds in non-crop areas and tree plantings.

# Injection Applications - for all non-cropland uses

Woody vegetation may be controlled by injection application of this product. Apply using suitable equipment, which must penetrate into living tissue, at a rate of at least 0.5 mL (either undiluted or 1:1 with water) per 5cm tree diameter at breast height (DBH). The cuts should be spaced evenly around the tree and below all major branches. Application may be made at any time of year, except when cold temperatures prevent adequate penetration of injection equipment, or in the spring during periods of heavy sap flow. Control of tree species with tree diameters greater than 20 cm may not be acceptable at this rate.

Total control may not be evident for 1-2 years following treatment. A list of species controlled includes:

**ALDER** HEMLOCK Alnus spp. Tsuga spp. BIRCH MAPLE<sup>†</sup> Acer spp. Betula spp. CEDAR PINE Thuja spp. Pinus spp. **CHERRY POPLAR** Prunus spp. Populus spp. **DOUGLAS FIR WILLOW** Pseudotsuga spp. Salix spp.

# **Cut Stump Application**

Woody vegetation may be controlled by the application of this product to freshly cut stumps to prevent regrowth. Because the treatment uses a concentrated solution, application must be made using low-pressure equipment, e.g., squirt bottle or similar device. This product must be applied immediately to the surface of the freshly cut stump i.e., within 5 minutes for optimum control at the prescribed rates. Only the cambial tissues of the cut surface should be treated. Apply the herbicide solution at a rate equivalent to at least 0.5 mL product for every 5cm DBH. Do not cover the remaining area or any exposed roots, as this product does not penetrate bark well. This treatment may be used at any time of year, except during periods of heavy sap flow or when low temperatures prevent solution application due to freezing. A water soluble colourant may be added to the solution as a means of indicating which surfaces have been treated. Total control may not be evident until 1-2 years after treatment.

Refer to section on injection applications on this label for the list of species controlled.

### **PASTURE RENOVATION**

Use this product to control or suppress existing vegetation for zero-tillage seeding of legumes into established sod for pasture renovation. Delay spraying until weed growth is at least 20 cm in height and a maximum number of seedlings or shoots have emerged. Application can be made immediately before, during or after seeding, but before crop emergence.

#### PASTURE RELEASE BY DIRECTED SPRAYING

Use this product to control herbaceous and woody species as listed on this label to release pasture from encroachment by woody plants. Understory species may also be controlled by this product but will regenerate during the normal course of succession. Grass in open areas will also be controlled.

# **Application Rates (Pasture Release)**

To control or suppress most herbaceous weeds, woody brush and trees, apply 3 to 6 litres of this product per hectare using ground boom or boomless, or mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment. For control of perennial herbaceous weeds, woody brush and trees in site preparation applications using ground boom or boomless, or mist blower equipment, apply 7 to 12 litres of this product per hectare as directed in the recommended volume of clean water to the foliage or actively growing vegetation. Use the 6 L/ha rate for control of maple, alder or willow species.

Apply when the undesirable species are actively growing and the foliage is full and well-developed. This product does not provide pre-emergent weed control. Repeat treatments may be necessary to control weeds that generate from underground parts or seed.

<sup>&</sup>lt;sup>†</sup>This treatment may only provide suppression of Big-Leaf Maple. Late fall applications will provide optimum suppression of Big- Leaf Maple

Undesirable deciduous species may be treated when they already have autumn colours, provided there has been no major leaf fall. For perennial broadleaf species, apply when most weeds have reached early head or early bud stage of growth. For annual and perennial grasses, apply when most weeds are 20 cm in height (3-4 leaf stage of growth).

Direct spray so that the foliage of undesired vegetation is thoroughly wetted. Do not spray foliage to the point of run-off.

See rates and application instructions on this label.

#### **RESTRICTED USE**

# PASTURE RELEASE Ground/Aerial Application

**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.

**NATURE OF RESTRICTION:** This product is to be used only in the manner authorized; consult local pesticide regulatory authorities about use permits which may be required.

Do not apply 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.

In order to reduce the drift hazard to non-target plants and aquatic species ensure that appropriate buffer zones are maintained.

#### **SITE PREPARATION**

Use this product as broadcast treatment at recommended rates, as listed below, to control herbaceous weeds, woody brush and tree species listed, to release pasture from encroachment by woody plants. Understory species, including grass, forbes and brush may also be controlled by this product, but will regenerate during the normal course of succession. Grass in open areas will also be controlled.

Apply when brush and tree species are actively growing and when foliage is full and well-developed. For best results apply in late summer or early fall. Some autumn colours on undesirable deciduous species are acceptable provided no major leaf fall has occurred. Vegetation should not be disturbed immediately prior to treatment or until visual signs appear after treatment.

# **DIRECTIONS FOR USE**

#### **Aerial Application**

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rates recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

#### **Aerial Application Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

#### **Aerial Application Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

#### **Aerial Application Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-247-8013 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in 20-100 L of water per ha as listed on the full label.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38412 may prevent corrosion.

#### **FORESTRY USES**

#### DO NOT APPLY BY AIR

Unless otherwise specified under a restricted use.

#### Application Rates (Forest and Woodland Management, Conifer/Deciduous/Pasture Release)

To control or suppress most herbaceous weeds, woody brush and trees, apply 3 to 6 litres of this product per hectare using ground boom or boomless, or mist blower equipment, or apply as a 1 to 2% solution using hand-held high volume equipment. For control of perennial herbaceous weeds, woody brush and trees in site preparation applications using ground boom or boomless, or mist blower equipment, apply 7 to 12 litres of this product per hectare as directed in the recommended volume of clean water to the foliage or actively growing vegetation. Use the 6 L/ha rate for control of maple, alder or willow species.

#### **WOODLAND MANAGEMENT (Treatment of 500 ha or less)**

SITE PREPARATION and FOREST ROADSIDE (Ground Only) and RIGHTS-OF-WAY VEGETATION MANAGEMENT

Use this product as broadcast treatment at recommended rates, to control herbaceous weeds, woody brush and tree species. For control of herbaceous weeds, apply when most perennial broadleaf weeds have reached the early head of early bud stage of growth. For perennial grasses, apply when most weeds are 20 cm in height. Apply when brush and tree species are actively growing and when foliage is full and well-developed. For best results apply in late summer or early fall. Some autumn colours on undesirable deciduous species are acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

For control of vegetation on sites with infestations of ericaceous species (e.g. Kalmia spp - sheep laurel, lamb kill), use 6 L/ha GF-772 Herbicide in the recommended water volume and an additional silicon-based surfactant (such as Sylgard 309) as per label instructions. Apply between mid-August and mid-September for maximum performance.

### **CONIFER RELEASE (Ground Only)**

Use this product as a broadcast spray at recommended rates, to control herbaceous weeds, woody brush and tree species, to release from competition the coniferous species listed below:

DOUGLAS FIR PINE
Pseudotsuga spp. Pinus spp.

FIR SPRUCE Abies spp Picea spp.

HEMLOCK *Tsuga*,spp.

For conifer release of spruce seedlings in the year of transplanting, apply 2 to 6 litres of this product per hectare in plantations of summer planted spruce species (Picea glauca, P. Engelmanii and their hybrids). Conifers must be planted in the same year as treatment and in the field for at least 18 days prior to treatment. Seedlings to be treated must clearly show bud set and bud hardening following a dormancy induction regime in the nursery. The need for such early release treatments is expected on sites which are subject to the rapid development of herbaceaous and shrub communities.

Most annual and perennial weeds will be controlled or suppressed. Applications must be made after formation of final conifer resting buds. Applications made during period of active conifer growth may result in conifer injury. Avoid application during Lammas or late season conifer growth. Some autumn colours are acceptable provided no major leaf fall has occurred on undesirable brush and tree species.

For conifer release, apply where conifers have been established for more than a year. Vegetation should not be disturbed immediately prior to treatment or until visual signs appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late fall. Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries, or in Christmas tree plantations. Applications in such sites should be limited to directed sprays. DO NOT TREAT Christmas tree plantations in the year of anticipated harvest.

# **Conifer Release by Directed Spraying**

Use this product to control herbaceous and woody species. Apply when the undesirable species are actively growing and the foliage is full and well-developed. This product does not provide pre-emergent weed control. Repeat treatments may be necessary to control weeds that generate from underground parts or seed.

Undesirable deciduous species may be treated when they already have autumn colours, provided there has been no major leaf fall. For perennial broadleaf species, apply when most weeds have reached early head or early bud stage of growth. For annual and perennial grasses, apply when most weeds are 20 cm in height (3-4 leaf stage of growth).

Direct spray so that the foliage of undesired vegetation is thoroughly wetted. Do not spray foliage to the point of run-off. Applying the product to conifers during their period of active growth (before lignification) may cause tree injury. Under such conditions, take the necessary precautions to ensure that spray, mist or spray drift does not come into contact with the foliage or green bark of conifers being cultivated.

The product may be applied on sites regenerated by the following species (partial list): SPRUCE (*Picea* spp.), PINE (*Pinus* spp.), HEMLOCK (*Tsuga* spp.), DOUGLAS FIR (*Pseudotsuga* spp.). No time interval is required between tree planting and application of the product. See vegetation controlled, specific rates and application and mixing instructions elsewhere on this label.

Do not allow spray to come in contact with foliage, green stems or fruit of non-target crops, since they may be killed or severely damaged.

# **DECIDUOUS RELEASE (Ground Only)**

Use this product to control herbaceous weeds and woody brush. Apply when the undesirable species are actively growing, and the foliage is well developed. This product has no pre-emergent activity. Repeat treatments may be required for species which regenerate from underground stems or from seeds. Applications may be made to undesirable deciduous species with some autumn colours, provided that major leaf fall has not yet occurred.

Use a directed spray to thoroughly cover the foliage of the undesirable vegetation. Take all necessary precautions to prevent contact of the spray, spray mist or spray drift with the foliage or green bark of desirable species.

A partial list of species for use with this product on regenerated sites includes: ASH (*Fraxinus* spp.); WALNUT (*Juglans* spp); LINDEN or BASSWOOD (*Tilia* spp); CHERRY (*Prunus* spp.); OAK (*Quercus* spp); ELM (*Ulmus* spp) and POPLAR (*Populus* spp). Product may be applied immediately after transplanting.

See use rates and application instructions elsewhere on this label.

#### **RESTRICTED USE**

#### FOREST and WOODLANDS MANAGEMENT

Ground/Aerial Application for Sites Greater Than 500 ha (Forestry Use) Aerial Application for Sites 500 ha or Less (Woodlands Use)

**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.

**NATURE OF RESTRICTION:** This product is to be used only in the manner authorized; consult local pesticide regulatory authorities about use permits which may be required.

Do not apply 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.

In order to reduce the drift hazard to non-target plants and aquatic species when aerially treating silvicultural sites, ensure that appropriate spray buffer zones are maintained.

# SITE PREPARATION

Use this product as broadcast treatment at recommended rates, to control herbaceous weeds, woody brush and tree species listed on this label. Apply when brush and tree species are actively growing and when foliage is full and well-developed. For best results apply in late summer or early fall. Some autumn colours on undesirable deciduous species are acceptable provided no major leaf fall has occurred. Following site preparation application of this product, any silvicultural species may be planted.

#### **CONIFER RELEASE**

Use this product as a broadcast spray at recommended rates, to control herbaceous weeds, woody brush and tree species listed on this label, to release from competition the coniferous species listed below:

DOUGLAS FIR
Pseudotsuga spp.
FIR
Abies spp.
HEMLOCK
Tsuga spp.

PINE
Pinus spp.
SPRUCE
Picea spp.

For conifer release of spruce seedlings in the year of transplanting, apply 2 to 6 litres of this product per hectare in plantations of summer planted spruce species (*Picea glauca*, *P. Engelmanii* and their hybrids). Conifers must be planted in the same year as treatment and in the field for at least 18 days prior to treatment. Seedlings to be treated must clearly show bud set and bud hardening following a dormancy induction regime in the nursery. The need for such early release treatments is expected on sites which are subject to the rapid development of herbaceaous and shrub communities.

Most annual and perennial weeds will be controlled or suppressed. Applications must be made after formation of final conifer resting buds. Applications made during period of active conifer growth may result in conifer injury. Avoid application during Lammas or late season conifer growth. Some autumn colours are acceptable provided no major leaf fall has occurred on undesirable brush and tree species.

For conifer release, apply where conifers have been established for more than a year. Vegetation should not be disturbed immediately prior to treatment or until visual signs appear after treatment. Symptoms of treatment are slow to appear, especially in woody species treated in late fall. Injury may occur to conifers treated for release, especially where spray patterns overlap or the higher rates are applied or when applications are made during periods of active conifer growth.

NOTE: This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries or in Christmas tree plantations. Applications in such cities should be limited to directed sprays. DO NOT TREAT Christmas tree plantations in the year of anticipated harvest.

# **DIRECTIONS FOR USE**

#### **Aerial Application**

Apply only by fixed-wing or rotary aircraft equipment which has been functionally and operationally calibrated for the atmospheric conditions of the area and the application rates and conditions of this label.

Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rates recommended for aerial application on this label. Where no rate for aerial application appears for the specific use, this product cannot be applied by any type of aerial equipment.

Ensure uniform application. To avoid streaked, uneven or overlapped application, use appropriate marking devices.

### **Aerial Application Use Precautions**

Apply only when meteorological conditions at the treatment site allow for complete and even crop coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *National Aerial Pesticide Application Manual*, developed by the Federal/Provincial/Territorial Committee on Pest Management and Pesticides.

#### **Aerial Application Operator Precautions**

Do not allow the pilot to mix chemicals to be loaded onto the aircraft. Loading of premixed chemicals with a closed system is permitted.

It is desirable that the pilot have communication capabilities at each treatment site at the time of application.

The field crew and the mixer/loaders must wear chemical resistant gloves, coveralls and goggles or face shield during mixing/loading, cleanup and repair. Follow the more stringent label precautions in cases where the operator precautions exceed the generic label recommendations on the existing ground boom label.

All personnel on the job site must wash hands and face thoroughly before eating and drinking. Protective clothing, aircraft cockpit and vehicle cabs must be decontaminated regularly.

# **Aerial Application Product Specific Precautions**

Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-247-8013 or obtain technical advice from the distributor or your provincial agricultural representative. Application of this specific product must meet and/or conform to the following:

Volume: Apply the recommended rate in 20-100 L of water per ha as listed on the full label.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of this product accumulated during spraying or from spills. PROLONGED EXPOSURE OF THIS PRODUCT TO UNCOATED STEEL SURFACES MAY RESULT IN CORROSION AND POSSIBLE FAILURE OF THE PART. LANDING GEAR ARE MOST SUSCEPTIBLE. The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38412 may prevent corrosion.

#### **HORTICULTURE USES**

#### DO NOT APPLY BY AIR

Unless otherwise specified under a restricted use.

#### TREE. VINE and BERRY CROPS

This product is recommended for annual and perennial weed control in established vineyards or orchards, in blueberry, cranberry and strawberry, or for site preparation prior to transplanting tree and vine crops. Applications may be made with boom equipment, shielded sprayers, hand-held and high volume orchards guns, or with wiper applicator equipment (orchards, vineyards, cranberry and strawberry only). Refer to mixing and application equipment information on this label and the following table for specific information on the use of equipment.

Repeat treatments may be necessary to control weeds originating from underground parts of untreated weeds or from seeds. This product does not provide residual or pre-emergent weed control. For subsequent weed control, follow a program using residual herbicides or use repeated applications of this product. Do not apply more than 35 litres of this product per hectare per year.

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF HERBICIDE SOLUTION, SPRAY, DRIFT, OR MIST WITH FOLIAGE OR GREEN BARK OF TRUNK, BRANCHES, SUCKERS, FRUIT, CANES OF BLUEBERRY BUSHES, OR OTHER PARTS OF TREES OR VINES. CONTACT OF THIS PRODUCT WITH OTHER THAN MATURED BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

Reduced control may result when applications are made 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.

# WEED CONTROL IN TREE, VINE and BERRY CROPS

Crop	Rate (L/ha)			Weeds Controlled	Comments
		Interval (days)	Yr.		(Refer to annual weed control and perennial weed control sections for specific rates for weed control)
Apples Apricot Cherry (Sweet/sour) Peaches Pears Plums	2.25 - 12	30	3	Annual and perennial weeds	
Apples Grapes	Tank Mix	-	1	Annual and perennial	- Will provide season-long pre-emergent control
	2.25 - 12			weeds	Do not apply to coarse, sandy or gravelly soil
	+				<ul> <li>Use according to the more restrictive label direction for each product in the mix</li> </ul>
	Simazine 2.0 - 4.5 kg ai/ha				- DO NOT apply to orchards or vineyards that have been established less than 1 or 3 years, respectively
					- Simazine rate is equivalent to 2.25 – 5.0 kg/ha Princep® Nine-T®, or 4.0-9.0 kg/ha Simadex®
Grapes	2.25 – 12	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	2.8 – 5.6	30	1	Quack- grass	- Use as a directed spray, with no more than 275 kPa pressure

Lowbush blueberry	1 – 2% solution (spot application)	Apply in non- bearing year only	1	Woody brush	- Apply as a directed spray in mid-summer of the vegetative (non-bearing) year - See spot treatment section for instructions
Filberts, Hazelnut (established plantations)	2.25 – 3.5	14	-	Annual weeds	- Use as a directed spray, with no more than 275 kPa pressure
Walnut, Chestnut, Japanese heartnut	2.25 – 12		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 2% wiper solution (see Wiper Applications section)
Cranberry	20% Solution (1 L GF-772 Herbicide+ 4L water)	30	1	Annual and perennial weeds	- Apply using wick or wiper applicators
Strawberry	1 – 2% solution (spot application) 33% solution (wiper application)	30	1	Emerged perennial weeds	- Apply when weeds are at a susceptible growth stage (see perennial weed control section) - See spot treatment section for instructions - See wiper application section for instructions
Sugar beets	1 – 2% solution (spot application)	Treated crop MUST NOT be harvested	1	Dodder species	<ul> <li>Apply when dodder is vigorously growing but before flowering.</li> <li>See spot treatment section for instructions.</li> </ul>
Asparagus	1.25 – 2.5	7	1	Fall seeded rye grass	-Apply in spring before emergence of crop shoots.

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

The DIRECTIONS FOR USE for the uses described in this section of the label were developed by persons other than Albaugh LLC under the User Requested Minor Use Label Expansion program. For these uses, Albaugh LLC has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

#### **DIRECTIONS FOR USE**

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

#### **NORTH AMERICAN GINSENG**

**New Gardens (British Columbia only)**: Apply this product in the fall after seeding but before freeze-up in new gardens only to control volunteer cereals. Apply when weeds are at the growth stages listed on the product label. Use a single application of 2.5 litres per hectare in 50 to 100 litres water per hectare. DO NOT USE A FALL APPLICATION IN ESTABLISHED/EXISTING GARDENS.

**Existing/Established Gardens**: Apply this product in the spring before the crop has emerged from the soil. Apply when weeds are at the growth stages described in the product label. A maximum of two 2.5 litres per hectare applications in 50 to 100 litres water per hectare may be made in a season. DO NOT USE A FALL APPLICATION IN ESTABLISHED/EXISTING GARDENS.

# TREE PLANTINGS

# **Shelterbelts and Nursery Stock (Woody Ornamentals)**

This product may be used to control listed annual or perennial weeds prior to planting, or as a post directed spray in established nurseries or shelterbelts of the following species:

#### Deciduous

Ash - Fraxinus spp.
Caragana - Caragan spp.
Cherry - Prunus spp.
Elm - Ulmus spp.
Lilac - Syringa spp.
Maple - Acer spp.
Mountain Ash - Sorbus spp.
Poplar - Populus spp.
Russian Olive - Elaeagnus spp.

#### Coniferous

Fir – Abies spp.
Juniper - Juniperus spp.
Pine - Pinus spp.
Spruce - Picea spp.
Yew - Taxus spp.

**NOTE:** This product is not recommended for use as an over-the-top broadcast spray in forest tree nurseries or in Christmas tree plantations. Application in such sites should be limited to directed sprays. DO NOT treat Christmas tree plantations in the year of anticipated harvest.

### **TURFGRASS**

Willow - Salix spp.

When applied as directed, under conditions described, this product controls most existing vegetation. Apply this product at rates specified in the NON-CROPLAND USES section of this label.

# DO NOT DISTURB SOIL OR UNDERGROUND PLANT PARTS BEFORE TREATMENT.

Where existing vegetation is growing in a field or unmowed situation, apply this product to actively growing weeds at the stages of growth specified. Where existing vegetation is growing under mowed turfgrass management, apply this product after omitting at least one regular mowing to allow sufficient growth for good interception of the spray and proper translocation into underground plant parts. Tillage or renovation techniques such as vertical mowing, coring or slicing should be delayed for 7 days after application to allow proper translocation into underground plant parts.

For maximum control of existing vegetation, delay establishment to determine if regrowth from escaped underground plant parts occurs. When repeat treatments are necessary, sufficient regrowth must be attained prior to application. Desirable turfgrasses may be established following the above procedures.

#### **CROPLAND USES**

#### DO NOT APPLY BY AIR

Unless otherwise specified under a restricted use.

### **CROPLAND USES INCLUDE:**

In cropping systems before planting of all crops; in minimum tillage systems, post emergent in glyphosate tolerant soybean, canola and corn; preharvest applications in wheat, barley, oats, canola (rapeseed), flax (including low linolenic acid varieties), peas, lentils, dry beans, soybeans and forages; in pasture renovation; in forage, legume and grass establishments; in tree crops including apple, pear, cherry, plum, peach, apricot, filbert, hazelnut, walnut, chestnut; in grapes, cranberries, blueberries and strawberry; in sugar beets; in tree plantings; and grasses for seed production.

ALWAYS READ PRECAUTIONARY STATEMENTS, GENERAL INFORMATION and MIXING and APPLICATION PRECAUTIONS PRIOR TO SPECIFIC APPLICATION INFORMATION IN ANY LABEL SECTION.

#### **ANNUAL WEED CONTROL**

The following tables provide rates and specific application instructions for control of the annual weeds listed.

#### ANNUAL WEED CONTROL WITH GF-772 HERBICIDE

RATE L/HA	GROWTH STAGE	WEEDS CONTROLLED	COMMENTS (Apply in 50 - 100 L/ha water)
0.75	weeds up to 8 cm in height	wild oats, green foxtail, volunteer barley, volunteer wheat  volunteer canola (rapeseed), wild mustard, lady's-thumb, stinkweed	<ul> <li>for wild oats apply at 1 - 3 leaf stage</li> <li>add 350 mL of the surfactant Agral® 90, or Ag Surf®, or Companion™.</li> <li>for heavy wild oat infestations use 1 L/ha rate.</li> </ul>
1.0	weeds 8 cm to 15 cm in height	all annual grasses listed above  all annual broadleaved weeds listed above plus flixweed† and kochia†	add 350 mL of surfactant registered or use as listed above.
1.25 - 1.9	weeds up to 15 cm in height	all annual grasses listed above plus downey brome, giant foxtail, and Persian darnel	no surfactant required  † for tank-mix weed control options see annual weed control with tank mixture section

		listed above plus lamb's quarters, redroot pigweed, hempnettle, flixweed, Russian thistle, volunteer flax, common ragweed†, Canada fleabane†,	# # # # # # # # # # # # # # # # # # # #	DO NOT use these rates on plants greater than 8 cm in height  for 3 - 4 leaf stage use 1.9 L/ha rate  for weeds 8 cm to 15 cm in height use
		wild buckwheat <sup>††</sup> , narrow- leaved hawk's beard <sup>†††</sup> ,		1.9 L/ha rate
2.25	weeds up to 15 cm in height	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		for additional annual broadleaved weed control options, refer to tank-mix table
3.5	weeds over 15 cm in height	all annual grasses and broadleaved weeds listed above		for additional annual broadleaved weed control options refer to tank-mix table

**NOTE:** For spot treatment, 0.75 – 3.5 L/ha is approximately equivalent to 8-35 mL/100 m<sup>2</sup>, respectively.

# PERENNIAL WEED CONTROL

ALWAYS READ PRECAUTIONARY STATEMENTS, GENERAL INFORMATION and MIXING and APPLICATION SECTIONS PRIOR TO SPECIFIC APPLICATION INFORMATION IN ANY LABEL SECTION.

When applied as recommended under the conditions described, this product will control the perennial weeds listed in the following table:

# PERENNIAL WEED CONTROL WITH GF-772 HERBICIDE

	APPLICATIO	N		
WEED	GROWTH STAGE	RAT E (L/ha ))	WATER VOLUME (L/ha)	COMMENTS
Quackgrass (control, light to moderate infestations)	3 to 4 green leaves or more	2.5	50 - 300	Apply in clean water using flat fan nozzles.     Allow 3 or more days after treatment before tillage.     Refer to Quackgrass notes for more information.     For higher water volumes (ie. 150 - 300 L/ha) an approved surfactant must be added at 0.5 litres per 100 litres of clean water (0.5% v/v). Refer to list of surfactants. See also below.
Quackgrass (long term control, heavy infestations, high water volumes)	3 to 4 green leaves or more	2.5 – 7	50 - 300	. Allow 3 or more days after treatment before tillage Rates higher than 2.5 L/ha will provide more consistent, longer term control, especially with heavier infestations and/or higher water volumes (ie 150-300 L/ha) . Refer to Quackgrass notes for more

				information.
Canada Thistle	rosette stage (summer- fallow)	2.5	50 - 100	Apply in clean water using flat fan nozzles.     Allow 10 or more days after treatment before tillage.     Refer to notes in Canada Thistle section for more information.
Canada Thistle	bud stage or beyond	4.75 -7	100 - 300	. Allow 5 or more days after treatment before tillage.
Field Bindweed	full bloom or beyond	7 – 12	100 - 300	. Allow 7 or more days after treatment before tillage.
Common Milkweed <sup>†</sup>	bud to full bloom (preharvest) bud to full bloom	2.5	50 - 100 100 - 300	See preharvest application section      Allow 7 or more days after treatment before tillage.     Reduced control may occur after full bloom.     Milkweed may not all be in the correct stage, therefore, repeat treatments may be required.
Toadflax	Vegetative Stage (summerfall ow)  Bud to Full Bloom (preharvest)	2.5	50-100	Apply in clean water using flat fan nozzles     Allow 7 or more days after treatment before tillage in summerfallow     For more information, see summerfallow control, or preharvest control
Alfalfa	Early bud to full bloom stage. Fall applications only	3.7 – 5	50 - 300	Allow 5 or more days after treatment before tillage. Use the higher rates when alfalfa populations are high or when heavy grass infestations are also present.      For spring applications and control in minimum tillage systems using a 2,4-D tank-mix. See Alfalfa Control with 2,4-D Tank-Mix section.
Dandelion	< 15 cm	2.5 3.7 – 5	50 - 100 50 - 300	Allow 3 or more days after treatment before tillage for all rates.      Use the higher rate when infestations are heavy.      Refer to notes in Dandelion Section for more information.      Allow 7 or more days after treatment before tillage. For more information, see preharvest control section.

	Rosette to full bloom (preharvest)	2.5	50 - 100	
Foxtail barley	Seedling to heading	2.5 – 5	50 -100	-Allow a minimum of 1 day after treatment before tillage or seeding.  -Use higher rates for larger, more established plants, heavy infestations or if plants are stressed
Other Perennials (see perennial weeds listing)	early heading or early bud stage	7 – 12	100 - 300	. Allow 7 or more days after application before tillage.

**†NOTE:** For spot treatment, mix 120 mL of product in 5L clean water per 100 m<sup>2</sup>. (2.5 - 12 L/ha) is approximately equivalent to 25 - 120 L/100 m<sup>2</sup>, respectively).

# SPECIAL NOTES FOR PERENNIAL WEED CONTROL QUACKGRASS

For **season-long control on fall tilled ground:** Apply 2.5L/ha of this product in spring prior to seeding. Apply in 50 to 100 L/ha of clean water as described in the preceding table. Delay application until the majority of quackgrass plants have 4-5 green leaves. This stage usually occurs 1 to 4 weeks later on fall tilled ground than on undisturbed ground. Reduced control may result on ground tilled deeper than 15 cm.

#### NOTE:

This treatment will provide season-long control of quackgrass on fall tilled ground. Reduced control will be experienced versus this product on non-fall tilled ground. Repeat treatments may be necessary.

**Applications on forages** should be followed by tillage 3 days or later and should be made when good growing conditions exist.

**If a frost has occurred**, wait several days to determine if the quackgrass has recovered. Quackgrass can be treated after a mild frost provided there are 3 to 4 green leaves actively growing at the time of application. Do not apply after the first damaging frost in the fall.

#### **Surfactant Information:**

The following is a list of approved surfactants for use with GF-772 Herbicide for control of quackgrass:

Agral 90 Companion Ag Surf Frigate®

Always refer to surfactant label for specific instructions regarding use of that product.

#### **CANADA THISTLE**

**Control of Canada Thistle at the rosette stage**: To ensure the proper timing of application the following steps must be followed:

- 1. Conduct summerfallow tillage as usual and perform the last tillage operation between July 15th and August 1.
- 2. Allow the thistles to regrow for a minimum of 5 weeks until they are a minimum of 15cm in diameter and in the rosette stage of growth.

**NOTE:** Canada thistle can be treated after a mild frost provided the leaves are still green and actively growing at the time of application. Do not apply after the first damaging frost in the fall.

# **GF-772 Herbicide plus Banvel II Tank Mixtures**

For control of Canada thistle (and perennial sow thistle) in summerfallow or in post-harvest stubble, apply 1.7 L/ha GF-772 Herbicide plus 1.25 L/ha Banvel II in 100 – 200 L/ha of clean water. In addition, add 350 mL/ha of a non-ionic surfactant registered for use with this product, such as Agral 90, Ag Surf, or Companion.

For best results in summerfallow, cultivate in the spring and apply when the 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 tank mixture.

If application is made after September 1<sup>st</sup>, or if soil moisture levels are extremely low after application, crop injury may occur in the spring following application.

#### **TOADFLAX**

#### Control of Toadflax in a Summerfallow Vegetative Stage

To ensure the proper timing of application, the following steps must be followed:

- 1. Conduct summerfallow tillage as usual and perform the last tillage operation between July 10-21.
- 2. Allow toadflax to regrow for a minimum of 4-5 weeks until they are minimum of 15 cm tall and at a lush green vegetative stage.

Note: Toadflax can be treated after a mild frost provided the leaves are still green and actively growing at the time of application. Do not apply after the first damaging frost.

#### **DANDELION**

Applications should be made up to and including bloom for best results. Follow-up control measures should be used to manage new dandelions germinating from seed to maintain control throughout the season.

#### **ALFALFA CONTROL WITH 2,4-D TANK-MIX:**

The addition of 2,4-D may improve alfalfa control in situations where control may be more difficult to obtain, such as in minimum tillage systems where populations are heavy, and with spring applications. For fall control of established stands of alfalfa, apply 2.5 – 5 L/ha GF-772 Herbicide – and 1.2 – 2.4 L/ha of any 500 g/L 2,4-D amine or low volatile ester formulation in 100 – 200 L water/ha. (Adjust product rates accordingly for other 2,4-D formulations).

For spring applications, use only the low rate of 2,4-D (i.e. 1.2 L/ha) and 2.5 – 5 L/ha GF-772 Herbicide. Only cereal crops not underseeded to legumes may be planted following spring applications of this tankmix, and a 14 day interval between application and planting is required.

Use the higher GF-772 Herbicide rates when perennial grasses are prevalent.

#### **ALL PERENNIAL WEEDS**

Weed Stages: Weeds must be at the proper stage for effective control.

**Nozzle Type**: For best results with conventional boom equipment apply this product with 50 to 300 L/ha of clean water using flat fan nozzles and no more pressure than 275 kPa.

**Rhizome Dormancy**: Reduced control may result if rhizomes have become dormant. Dormancy may occur if soil fertility is low and/or the land has not been tilled for several years.

**Mowing Effects**: Mowing prior to application will reduce effectiveness unless weeds are allowed to regrow to the proper stage before application.

**Tillage Effects**: Fall or spring tillage prior to spring applications and tillage between harvesting and fall applications will reduce the effectiveness on perennial weeds. Follow-up tillage after application should be delayed 5-7 days for best results (see Weed Control table for specific tillage interval for each weed).

**Rainfall Effects:** Heavy rainfall immediately after application may wash the chemical off the foliage and a repeat treatment may be required. Do not apply if rainfall is forecast for the time of application.

**Regrowth from Germinating Seeds**: This product only controls emerged plants. Repeat treatments or other weed control measures may be required to control weeds regenerating from seeds or other underground parts.

**Frost Effects**: Heavy frosts prior to application may reduce control. Do not apply after the first damaging frost in the fall.

#### **CROPLAND SITUATIONS**

This product can be applied as a broadcast spray or spot treatment prior to planting all crops, post harvest to annual crops, preharvest in wheat, barley, oats, canola (rapeseed), flax (including low linolenic acid varieties), lentils, peas, soybeans, dry beans and forages, and in summerfallow. It may also be applied as a broadcast spray in glyphosate tolerant canola, soybean or corn (refer to sections on Weed Control in Glyphosate Tolerant Canola, Soybean or Corn). It can also be applied as a directed spray in orchards, vineyards, blueberries and strawberry, and using selective equipment in soy and dry beans, orchards, vineyards, cranberries and strawberry (refer to specific sections below for more information). For specific instructions on weed control in the following cropping situations, always refer to the Annual and Perennial Weed Control sections for more information.

#### **Prior to Planting - All Crops**

This product may be applied prior to planting all crops for control of emerged weeds listed on this label. Ensure weeds are at the desired stage at the time of application. This product does not provide preemergent weed control and newly germinating weeds may be a problem in the crop. APPLY BEFORE SEEDING OR TRANSPLANTING.

# Minimum and Zero Tillage Cropping Systems (All Field Crops, including cereals, oilseeds, pulses, forages, corn and potatoes)

This product may be applied prior to seeding or after seeding, but before crop emergence for control of emerged weeds in minimum and zero tillage cropping systems for all field crops. Applications made too far in advance of seeding may allow weeds to emerge between application and crop emergence, as this product does not provide residual weed control.

# Minimum and Zero Tillage Tank Mixtures

**GF-772 Herbicide plus bromoxynil (Pardner)** can be applied prior to seeding or after seeding, but before crop emergence in **wheat, barley and oats.** 

**GF-772** Herbicide plus Pursuit® can be applied prior to, or after, seeding, but before crop emergence in soybeans. GF-772 Herbicide will control emerged weeds listed on this label when applied as directed (refer to Annual and Perennial Weed Control sections). Pursuit will control weeds germinating from seed. Add the recommended rates of both products in 100 L of water/ha, following the instructions on the Pursuit herbicide label. Always refer to the Pursuit label for further information on weeds controlled, application directions, and use precautions. 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.

**GF-772 Herbicide plus MCPA** can be applied prior to seeding in wheat, barley, rye, oats, corn (field and sweet; MCPA amine only), flax and field peas (MCPA amine only).

GF-772 Herbicide plus Buctril M. can be applied prior to seeding in wheat, rye, corn, barley, oats, flax, canary seed and seedling grasses (including brome grass, crested wheatgrass, intermediate wheat grass, slender wheatgrass, tall wheatgrass, Russian wild rye,

Timothy, Orchard grass, creeping red fescue, meadow fescue, meadow foxtail, seedling tall fescue, seedling meadow bromegrass, seedling streambank wheatgrass and reed canary grass

**GF-772 Herbicide plus MCPA amine** can be applied prior to seeding in **lentil and chickpea**. Refer to tank-mixture table for information.

# Forage Legumes and Grasses

This product may be applied for control of emerged weeds prior to emergence of forage legumes and grasses. If the forages are to be under-seeded with a cover crop, this product must be applied prior to planting the cover crop.

#### **Spot Treatment (In-Crop)**

This product can be applied as an in-crop spot treatment in barley, corn, oats, soybeans, wheat, strawberry, blueberry, forage grasses and legumes including seed production. Applications should be made using the same rates and at the same growth stages as listed in the weed control tables or use a 1% solution for annual weeds and quackgrass and a 2% solution for other perennial weeds (a 1% solution equals 1 litre GF-772 Herbicide in 100 litres of spray solution). The 1 or 2 per cent solutions should be applied to wet, but not run-off. Applications can be made using a boom sprayer, hose and handgun, or hand sprayer in accordance with instructions outlined on this label.

#### Forage Seed Production

For spot treatment control of perennial weed problems such as quackgrass and Canada thistle in seed fields, apply as directed to vegetation that is at least 20 to 25 cm in height but before emergence of seed head. The crop in the treated areas will be killed. Take care to avoid drift outside target area for the same reason.

#### **Summerfallow Treatment**

This product, or labelled tank mixtures, may be applied in summerfallow to control weeds listed on this label. Ensure weeds are at the desired growth stage and actively growing at application for best results. Reduced control may result if weeds are drought stressed. Weeds will continue to germinate from seed throughout the growing season. Repeat treatments may be necessary to control later germinating weeds.

# ANNUAL WEED CONTROL WITH GF-772 HERBICIDE TANK MIXTURES FOR SUMMERFALLOW & MINIMUM TILLAGE SYSTEMS

TANK MIXTURES	RATE L/ha	WEEDS CONTROLLED	COMMENTS (Apply in 50 - 100 L/ha water; add 350mL/ha of surfactant)
GF-772 Herbicide	0.75 – 1 +	Volunteer cereal, wild oats, green foxtail,	This tank-mix is registered for <b>summerfallow use only.</b> Weeds should be less than 15 cm tall and actively growing for best results.
+ Banvel® II	0.29	Volunteer canola (rapeseed), wild mustard, flixweed <sup>†</sup> , lamb's quarters, lady's thumb, stinkweed, kochia, Russian thistle, cow cockle, redroot pigweed <sup>††</sup> , wild buckwheat <sup>††</sup> .	Use higher rate if weeds are beyond 8 cm in height.  †GF-772 Herbicide applied at 1 L/ha rate only.
		p.g. see , m.a baokimoat .	††Suppression only. See other tank mixtures for control options.

GF-772 Herbicide	0.75 – 1	Volunteer cereals, green foxtail, volunteer canola (rapeseed), wild mustard, lady's thumb, stinkweed, wild buckwheat†	This tank-mix is registered only for use in summerfallow, and prior to wheat, oats and barley in minimum tillage systems. Weeds should be less than 15 cm tall and actively growing for best results.
+ Pardner®		Redroot pigweed <sup>††</sup> , kochia <sup>††</sup> , wild oats <sup>††</sup>	Use higher rate if weeds are beyond 8 cm in height.
raidilei	1.25		†use GF-772 Herbicide at 1 L/ha rate only for wild buckwheat control.
			<sup>††</sup> 1 L rate, suppression only. See other tank mixtures for control options.
GF-772 Herbicide	0.75 – 1	Volunteer cereals, wild oats† and green foxtail† volunteer canola (rapeseed), wild	This tank-mix is registered for <b>summerfallow</b> use only. Weeds should be less than 15 cm tall and actively growing for best
+	+	mustard, flixweed, redroot pigweed, lady's thumb, stinkweed, kochia.	results. Use higher rate if weeds are beyond 8 cm in height  †use GF-772 Herbicide at 1 L/ha rate only for wild oat and green foxtail control.
2,4-D#	1.2	Lamb's quarters <sup>††</sup> , Russian thistle <sup>††</sup> .	††suppression only. See other tank mixtures for control options.
GF-772 Herbicide	1.25-1.9 + 0.6-0.9 <sup>4</sup>	Volunteer cereals, wild oats, green foxtail, downy brome, giant foxtail, and	Weeds should be less than 15 cm tall and actively growing for best results.
+ 2,4-D##	or 1.2-1.5 <sup>5</sup>	Persian darnel.  Volunteer canola,	Use higher rate if weeds are beyond 8 cm in height.
		(rapeseed) (non-glyphosate tolerant), wild mustard,	No surfactant required.
		flixweed, redroot pigweed, lady's-thumb, stinkweed, kochia,	† DO NOT use these rates on plants greater than 8 cm in height.
		lamb's-quarters, hempnettle, Russian	<sup>††</sup> For 3-4 leaf stage use 1.9 L/ha rate.
		thistle, volunteer flax, common ragweed <sup>†</sup> , Canada fleabane, wild	††† For weeds 8 cm to 15 cm in height use 1.9 L/ha rate.
		buckwheat <sup>††</sup> , narrowleaved hawk's beard <sup>†††</sup>	<sup>4</sup> 2,4-D at 0.6 – 0.9 L/ha (280 – 420 g ai/ha).
		Glyphosate tolerant volunteer	<sup>5</sup> 2,4-D at 1.2 – 1.5 L/ha (560 – 700 g ai/ha).
		canola (1-4 leaf stage) <sup>4</sup> , bluebur <sup>4</sup> , burdock <sup>4</sup> , cocklebur <sup>4</sup> , common plantain <sup>4</sup> , daisy fleabane <sup>4</sup> , false flax <sup>4</sup> , false ragweed <sup>4</sup> , goat's beard <sup>4</sup> , mustards <sup>4</sup> (except dog and tansy),	Use this tank mix prior to seeding or after seeding but before crop emergence in wheat, winter wheat, barley and rye.
		prickly lettuce <sup>4</sup> , ragweeds <sup>4</sup> , Russian pigweed <sup>4</sup> , shepherd's purse <sup>4</sup> , stinging nettle <sup>4</sup> , sweet clover <sup>4</sup> , thymeleaved	

		spurge <sup>4</sup> , wild radish <sup>4</sup> , wild sunflower <sup>4</sup> Glyphosate tolerant volunteer canola (4-6 leaf stage) <sup>5</sup> , annual sow thistle <sup>5</sup> , common chickweed <sup>5</sup> , common purslane <sup>5</sup> , dog and tansy mustard <sup>5</sup> , oakleaved goosefoot <sup>5</sup> , groundsel <sup>5</sup> , hairy galinsoga <sup>5</sup> , hawkweed <sup>5</sup> , heal-all <sup>5</sup> , knotweed <sup>5</sup> , peppergrass <sup>5</sup> , pineapple weed <sup>5</sup> , prostrate pigweed <sup>5</sup> , purslane <sup>5</sup> , sheep sorrel <sup>5</sup> , smartweed <sup>5</sup> , tumble pigweed <sup>5</sup> , velvetleaf <sup>5</sup> , volunteer canola <sup>5</sup>	
GF-772 Herbicide	1.25-1.9 +	Volunteer cereals, wild oats, green foxtail, downy	Weeds should be less than 15 cm tall and actively growing for best results.
+ MCPA### 500 g/L formulation, if another formulation is used,	0.5 –0.7 <sup>1</sup> OR 0.5 –1.0 <sup>2</sup>	brome, giant foxtail, and Persian darnel.  Volunteer canola (rapeseed) (non-glyphosate tolerant), wild mustard, flixweed, redroot	Use higher rate if weeds are beyond 8 cm in height.  No surfactant required.  † DO NOT use these rates on plants greater than 8 cm in height.
adjust rate accordingly		pigweed, lady's thumb, stinkweed, kochia, lamb's quarters, hempnettle,	†† For 3-4 leaf stage use 1.9 L/ha rate.
		Russian thistle, volunteer flax, common ragweed <sup>†</sup> , Canada fleabane, wild	††† For weeds 8 cm to 15 cm in height use 1.9 L/ha rate.
		buckwheat <sup>††</sup> , narrowleaved hawk's beard <sup>†††</sup>	<sup>1</sup> MCPA amine at 0.5 – 0.7 L/ha (250-350 g ai/ha) prior to peas.
		Volunteer glyphosate tolerant canola (1-4 leaf stage) <sup>1,2</sup> ,bluebur <sup>3</sup> , burdock3 (before 4 leaf stage), false	<sup>2</sup> MCPA at 0.5 – 1.0 L/ha (250- 500 g ai/ha) prior to wheat, barley, oats, corn (field and sweet)###, rye and flax.
		flax <sup>3</sup> , flixweed <sup>3</sup> , lamb's quarters <sup>3</sup> , mustards <sup>3</sup> (except dog and tansy),	<sup>3</sup> MCPA at 0.7 – 1.0 L/ha (350 – 500 g ai/ha) only.
		prickly lettuce <sup>3</sup> , ragweeds <sup>3</sup> , redroot pigweed <sup>3</sup> , Russian pigweed <sup>3</sup> , shepherd's purse <sup>3</sup> , stinkweed (field pennycress) <sup>3</sup> , vetch <sup>3</sup> , wild radish <sup>3</sup> , wild sunflower <sup>3</sup>	Use this tank mix prior to seeding in wheat, barley, rye, oats, corn (field and sweet)###, flax, and field peas###.

GF-772	1.25-1.9	Volunteer cereals, wild	Weeds should be less than 15 cm tall and
Herbicide	+	oats, green foxtail, downy	actively growing for best results.
+ Buctril M herbicides	0.5 –1.0 <sup>1</sup>	brome, giant foxtail, and Persian darnel.	Use higher rate if weeds are beyond 8 cm in height.
		Volunteer canola (rapeseed) (non-glyphosate	No surfactant required.
		tolerant), wild mustard, flixweed, redroot pigweed, lady's thumb,	<sup>†</sup> DO NOT use these rates on plants greater than 8 cm in height.
		stinkweed, kochia, lamb's quarters, hempnettle,	<sup>††</sup> For 3-4 leaf stage use 1.9 L/ha rate.
		Russian thistle, volunteer flax, common ragweed <sup>†</sup> , Canada fleabane, wild	††† For weeds 8 cm to 15 cm in height use 1.9 L/ha rate.
		buckwheat <sup>††</sup> , narrowleaved hawk's beard <sup>†††</sup>	<sup>1</sup> Buctril M at 0.5 – 1.0 L/ha (280- 560 g ai/ha) for all crops listed.
		Volunteer glyphosate tolerant Canola (1-4 leaf stage) <sup>1,2</sup>	<sup>2</sup> Buctril M at 1.0 L/ha (560 g ai/ha only).
		Seedlings up to the 4-leaf stage <sup>2</sup> : green smartweed,	<sup>3</sup> Spray before plants are 5 cm high.
		pale smartweed, lady's	<sup>4</sup> Spring annuals only.
		thumb, cow cockle, redroot pigweed,	<sup>5</sup> Spray before plants are 8 cm high.
		flixweed, bluebur, shepherd's purse, kochia <sup>3</sup> , Russian thistle <sup>3</sup> , scentless chamomile <sup>4</sup> , volunteer sunflower, night flowering catchfly, cocklebur, velvetleaf <sup>5</sup> , ball mustard, American nightshade	Use this tank mix prior to seeding in wheat, barley, rye, oats, corn, flax, canary seed and seedling grasses (including brome grass, crested wheatgrass, intermediate wheat grass, slender wheatgrass, tall wheatgrass, Russian wild rye, Timothy, orchard grass, creeping red fescue, meadow fescue, meadow foxtail,
		Seedlings up to the 6-leaf stage <sup>2</sup> : wild tomato Seedlings up to the 8-leaf stage <sup>2</sup> : wild buckwheat, tartary buckwheat, common buckwheat, stinkweed, wild mustard, wormseed mustard,	seedling tall fescue, seedling meadow bromegrass, seedling streambank wheatgrass and reed canary grass.
		lamb's quarters, common ragweed, common groundsel	
		Perennials (top growth) <sup>2</sup> : Canada thistle, perennial sow thistle	

GF-772	1.25-1.9	Volunteer cereals, wild	Weeds should be less than 15 cm tall and
Herbicide	+	oats, green foxtail, downy	actively growing for best results.
+ MCPA Amine	0.5 –0.7	brome, giant foxtail, and Persian darnel.	Use higher rate if weeds are beyond 8 cm in height.
(500 g/L formulation,		Volunteer canola (rapeseed) (non-glyphosate	No surfactant required.
if another formulation is used,		tolerant), wild mustard, flixweed, redroot pigweed, lady's thumb,	<sup>†</sup> DO NOT use these rates on plants greater than 8 cm in height.
adjust rate accordingly)		stinkweed, kochia, lamb's quarters, hempnettle,	<sup>††</sup> For 3-4 leaf stage use 1.9 L/ha rate.
		Russian thistle, volunteer flax, common ragweed <sup>†</sup> , Canada fleabane, wild	††† For weeds 8 cm to 15 cm in height use 1.9 L/ha rate.
		buckwheat <sup>††</sup> , narrowleaved hawk's beard <sup>†††</sup>	<sup>3</sup> MCPA amine at 0.5 – 0.7 L/ha (250 – 350 g ai/ha) prior to lentils and chickpeas.
		Volunteer glyphosate tolerant canola (1-4 leaf stage) <sup>3</sup> ,bluebur <sup>4</sup> , burdock <sup>4</sup>	<sup>4</sup> MCPA amine at 0.7 L/ha (350 g ai/ha) only.
		(before 4 leaf stage), false flax <sup>4</sup> , flixweed <sup>4</sup> , lamb's quarters <sup>4</sup> , mustards <sup>4</sup> (except dog and tansy), prickly lettuce <sup>4</sup> ,	Use this tank mix prior to seeding in lentil and chickpea.
		ragweeds <sup>4</sup> , redroot pigweed <sup>4</sup> , Russian	
		pigweed <sup>4</sup> , shepherd's purse <sup>4</sup> , stinkweed <sup>4</sup> (field	
		pennycress), vetch <sup>4</sup> , wild radish <sup>4</sup> , wild sunflower <sup>4</sup>	

For foxtail barley suppression, refer to Annual Weed Control table

#0.56 kg ai/ha of 2,4-D. #, ## Adjust rates accordingly for other 2,4-D formulations. Use only low volatile ester or amine formulations of 2,4-D.

### Use only amine formulations of MCPA prior to seeding in corn and field peas.

# PRE-HARVEST CONTROL OF QUACKGRASS, CANADA THISTLE, MILKWEED, TOADFLAX and DANDELION; SEASON-LONG CONTROL OF PERENNIAL SOW THISTLE, AND HARVEST MANAGEMENT

For control of quackgrass, Canada thistle, common milkweed, toadflax and dandelion; and season-long control of perennial sow thistle, GF-772 Herbicide can be applied prior to harvest of wheat, barley (including malting barley), oats, canola (rapeseed), flax (including low linolenic acid varieties), lentils, peas, dry beans, soybeans and forages. 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.

GF-772 Herbicide should be applied pre-harvest at 2.5 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. For forage crops, apply this product at 2.5-5.0 L/ha 3-7 days prior to the last cut before rotation or forage renovation. Consult Guidelines for Timing of Preharvest Applications table below 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. Common milkweed should be at the bud to bloom stage and actively growing 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 (or 3-7 days for forage applications) 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.

#### **GUIDELINES FOR TIMING OF PREHARVEST APPLICATIONS**

CROP(S)	PERCENT GRAIN MOISTURE	VISUAL SYMPTOMS
WHEAT/BARLEY/	Less than 30	Hard dough stage; a thumbnail impression
OATS		remains on seed.
CANOLA	Less than 30	Pods are green to yellow; most seeds are yellow to brown.
FLAX	Less than 30	Majority (75%-80%) of bolls are brown.
(INCLUDING LOW LINOLENIC ACID VARIETIES)		
PEAS	Less than 30	Majority (75%-80%) of pods are brown.
LENTILS	Less than 30	Lowermost pods (bottom 15%) are brown and seeds rattle.
DRY BEANS	Less than 30	Stems are green to brown in colour; pods are mature (yellow to brown in colour); 80%-90% leaf drop (original leaves).
SOYBEANS	Less than 30	Stems are green to brown in colour; pod tissue is dry and brown in appearance; 80%-90% leaf drop.
FORAGES	Not applicable	Normal stage for forage harvesting.

#### **RESTRICTED USE**

AERIAL PREHARVEST APPLICATION FOR PRAIRIE PROVINCES AND INTERIOR OF BRITISH COLUMBIA (Including PEACE RIVER REGION OF B.C.) ONLY

**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 this 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.

**NATURE OF RESTRICTION:** This product is to be used only in the manner authorized. For use only by aerial applicators and aerial application services approved by the provincial regulatory agency to apply this product with aerial application equipment. To qualify for consideration of provincial approval, the following requirements must be demonstrated to the provincial regulatory agency:

- 1. Aircraft used in the application of this product must have been configured and calibrated to acceptable standards at a recognized calibration (patternation) clinic within 20 months of the date of application. The spray system must not have been subjected to major changes (new nozzles, booms or configurations) since the calibration, and must meet critical drift management standards e.g. maximum boom width 65% of wing span; nozzle type, size and orientation to minimize drift and deliver droplet size VMD in the coarse (400-600 microns) or very coarse (600 1000 microns) range.
- 2. Aircraft used in the application of this product must carry a minimum of \$25,000 drift insurance in addition to any provincial requirements for general comprehensive insurance coverage.
- 3. Applicators using this product must have successfully completed a GF-772 aerial application training course provided by Albaugh LLC.
- 4. Aerial application services applying this product must employ on staff at least one pilot applicator with at least 250 hours of actual aerial application time and a minimum of 100 hours within the last 24 month period. All pilots who do not meet the minimum experience standard must work under the direct daily supervision of a qualified pilot.

#### **DIRECTIONS FOR USE**

GF-772 Herbicide may be applied with aerial application equipment for control of quackgrass, Canada thistle, common milkweed, toadflax and dandelion, and season-long control of perennial sow thistle. GF-772 Herbicide can be applied prior to harvest of wheat, barley (including malting barley), oats, canola (rapeseed), flax (including low linolenic acid varieties), lentils, peas, dry beans, and soybeans. DO NOT apply to any 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.

GF-772 Herbicide should be applied at 2.5 L/ha in 20 - 50 L/ha of clean water with aerial application equipment. Apply only when the crop has 30% or less grain moisture content. This stage typically occurs 7 to 14 days before harvest. Consult the table entitled Guidelines for Timing of Preharvest Applications 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. Common milkweed should be at the bud to bloom stage and actively growing 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.

#### **Post Harvest Stubble Treatment**

This product may be applied in the fall as a postharvest stubble treatment for control of perennial weeds such as quackgrass and Canada thistle. Allow weeds to regrow to the desired stage (20-25 cm tall for quackgrass and Canada thistle) before application and ensure they have a high proportion of green colouration. Straw should be removed or evenly spread to allow for proper regrowth and spray coverage. Heavy frosts prior to application may decrease control.

#### **Addition of Sufactant**

All GF-772 Herbicide tank mixtures for annual weed control require the addition of the surfactant Agral 90, or Ag Surf, or Companion. Surfactant should be added at a rate of 350 mL per hectare, in 50 – 100 L of clean water.

# Additional Important Information for Annual Weed Control in Crops

Allow at least 1 day after treatment before tillage

Annual weeds generally will continue to germinate from seed throughout the growing season. Repeat treatments may be necessary to control later germinating weeds, in some situations.

For additional information and precautions, refer to General Information and Mixing and Application sections of this label.

WEED CONTROL IN GLYPHOSATE TOLERANT CANOLA WARNING: APPLY GF-772 HERBICIDE ON GLYPHOSATE TOLERANT CANOLA VARIETIES ONLY.

NOTE: ALWAYS USE PEDIGREED (I.E. CERTIFIED) GLYPHOSATE TOLERANT CANOLA SEED. CANOLA WHICH IS NOT DESIGNATED AS GLYPHOSATE TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.

- For additional information and precautions, refer to General Information and Mixing and Application sections of this label.
- Apply GF-772 Herbicide in glyphosate tolerant canola only as directed in the following weed control table.
- Some short-term, visual yellowing may occur when GF-772 Herbicide applied at the late application 4 to 6 leaf stage of the crop. This effect is temporary and will not influence crop growth, maturity or yield.

The following table describes therate and specific application instructions for control of annual and perennial weeds in glyphosate tolerant canola varieties.

#### WEED CONTROL IN GLYPHOSATE TO LERANT CANOLA

Rate (L/ha)	Growth Stage OfCrop	Weeds Controlled	Comments (Apply in 50 - 100 L/ha water)
0.825-1.25	0 to 6 leaf	Annual Grasses wild oats, green foxtail, volunteer barley, volunteer wheat, barnyard grass  Annual Broadleaves stinkweed, redroot pigweed, wild mustard, Russian thistle, lamb's-quarters, non- glyphosate tolerant volunteer canola (rapeseed), hempnettle, lady's thumb, kochia, chickweed, corn spurry, wild tomato, cleavers†, wild buckwheat†, shepherd's purse†, cow cockle†, night-flowering catchfly†, smartweed†, storksbill†, flixweed†, narrow-leaved hawk's beard†, round-leaved mallow†††  Perennials (suppression)††  Canada thistle, Perennial sow thistle, Dandelion  Perennials (season long control)	No additional surfactant is required  Repeat applications may be required if a second flush of weeds germinates prior to canopy closure.  Ensure the crop has not advanced beyond the recommended growth stage.  Use the 1.25 L/ha rate for control of these weeds at all crop growth stages. The lower rate can be used for control of shepherd's purse, cowcockle and night-flowering catchfly at the 1-3 leaf stage of the crop, or for control of smartweed at the 4-6 leaf stage.  A single application at the 1.25 L/ha rate is required  Sequential applications at the 1.25 L/ha rate are required.  Sequential applications at the 1.25 L/ha rate are required or a single application of 1.875 L/ha.

	Quackgrass <sup>††</sup> , foxtail barley <sup>†††</sup> Canada thistle <sup>††††</sup> , Perennial sow thistle <sup>††††</sup>	For sequential applications, ensure the crop has not advanced beyond the recommended growth stage.  Maximum 2.5 L/ha is allowed for the postemergence use.
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# GF-772 Herbicide plus Lontrel™ 360 Herbicide Tank Mixture

For hard-to-control weeds (see list below) in glyphosate tolerant canola apply a tank mixture of 0.28 L/ha of Lontrel 360 with 1.25 L/ha of GF-772 Herbicide in 100L of water per hectare. Apply when canola is in the 2 - 6 leaf stage. Refer to the Lontrel 360 and the GF-772 Herbicide labels for lists of other weeds controlled, timing of application, water volumes and use precautions. **Apply this tank-mixture in glyphosate tolerant canola only.** 

#### **Weeds Controlled**

Canada thistle (season-long top growth) dandelions <15cm diameter (season-long top growth) dandelions >15cm diameter (suppression) perennial sowthistle (season-long top growth) wild buckwheat

# WEED CONTROL IN GLYPHOSATE TOLERANT SOYBEAN WARNING: APPLY GF-772 HERBICIDE ON GLYPHOSATE TOLERANT SOYBEAN VARIETIES ONLY.

NOTE: ALWAYS USE PEDIGREED (CERTIFIED) SOYBEAN SEED DESIGNATED AS GLYPHOSATE TOLERANT. SOYBEANS WHICH ARE NOT DESIGNATED AS GLYPHOSATE TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.

# WEED CONTROL IN GLYPHOSATE TOLERANT SOYBEAN

Rate (L/ha)	Growth Stage of Crop	Weeds Controlled <sup>*</sup>	Comments (use 100-200 L/ha water volumes)
2.5	First trifoliate leaf stage through to flowering.	velvetleaf, common ragweed, common lambsquarters, redroot pigweed, smooth pigweed, cocklebur, green smartweed, ladysthumb, Pennsylvania smartweed, eastern black flowering nightshade, wild mustard, wild buckwheat, foxtail (green, yellow, giant), barnyard grass, crabgrass (smooth, large), quackgrass, milkweed†, yellow nutsedge†, fall panicum, wild proso millet	A second application may be used for late weed flushes emerging after the initial treatment     *     * suppression only.*      * This second application must be made no later than the flowering stage of the soybean.
2.5-5	First trifoliate leaf stage through to flowering.	Perennial sow thistle, Canada thistle, wire- stemmed muhly	A single application at the higher rate or a second (sequential) application of 2.5     L/ha will improve control in heavy weed infestations.      If sequential applications of 2.5     L/ha are used they should

			least 2 weeks apart for best results on perennial weeds.  • This second application must be made no later than the flowering stage of the soybean.  • Perennial sow thistle and Canada thistle should be from the rosette stage to 50 cm in height and actively growing.  • Wire-stemmed muhly should be 10-20 cm in height and actively growing.  • Plants not fully emerged at the time of application will escape the treatment.
5	First trifoliate leaf stage through to flowering.	All weeds listed above, plus milkweed††, yellow nutsedge††, field bindweed††	<ul> <li>Only one application per season at 5 L/ha.</li> <li>Will also be controlled by sequential applications of 2.5 L/ha. Applications should be at least 2 weeks apart for optimum control.</li> <li>This second application must be made no later than the flowering stage of the soybean.</li> <li>Milkweed should be 15-60 cm in height and actively growing; nutsedge should be 5-15 cm in height and actively growing. Plants not fully emerged at the time of application will not be controlled</li> </ul>

\* Weeds will be more easily controlled and early crop competition avoided with applications made when the weeds are small. Control of weeds greater than 25 cm in height will be inconsistent, although some weeds may be controlled.

### **GF-772 Herbicide plus Pursuit Herbicide Tank Mixture**

For added residual control of late germinating eastern black nightshade, common lamb's quarters, redroot pigweed, velvetleaf, fall panicum and wild proso millet, Pursuit herbicide may be tank mixed with GF-772 Herbicide at a rate of 2.5 litres per hectare. Use 0.16 to 0.21 litres per hectare of Pursuit Herbicide and apply up to and including the 3rd trifoliate leaf stage of the glyphosate tolerant soybeans in 100-200 litres per hectare of clean water. The higher rate is recommended for heavier infestations. This tank mix is recommended primarily for soybean systems with row spacings of 50 centimetres (20 inches) or more where a single application timing is desired.

Mixing: Add and mix Pursuit Herbicide as per instructions on the Pursuit Herbicide label and then add GF-772 Herbicide as per instructions on this label.

A PHI of 100 days is required for the tank mix of GF-772 Herbicide and Pursuit herbicide on glyphosate tolerant soybeans.

Only one application per season of GF-772 Herbicide at 2.5 litres per hectare tank mixed with Pursuit herbicide at 0.16 to 0.21 litres per hectare is permitted.

Refer to the Pursuit herbicide label for further safety precautions and handling instructions.

WEED CONTROL IN GLYPHOSATE TOLERANT CORN
WARNING: APPLY GF-772 HERBICIDE ON GLYPHOSATE TOLERANT CORN VARIETIES ONLY.

NOTE: ALWAY USE PEDIGREED (CERTIFIED) CORN SEED DESIGNATED AS GLYPHOSATE TOLERANT. CORN WHICH IS NOT DESIGNATED AS GLYPHOSATE TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.

# WEED CONTROL IN GLYPHOSATE TOLERANT CORN:

Rate (L/ha)	Growth Stage of Crop	Weeds Controlled <sup>†</sup>	Comments (use 100-200 L/ha water volumes)
2.5	Up to and including 8 leaf stage.	Velvetleaf, common ragweed, common lambsquarters, redroot pigweed, smooth pigweed, cocklebur, green smartweed, ladysthumb, Pennsylvania smartweed, eastern black flowering nightshade, wild mustard, wild buckwheat, foxtail (green, yellow, giant), barnyard grass, crabgrass (smooth, large), quackgrass, fall panicum, wild proso millet  Wild oats, volunteer barley, volunteer wheat, stinkweed, wild mustard, Russian thistle, nonglyphosate tolerant canola (rapeseed), hempnettle, kochia, chickweed, corn spurry, wild tomato, cleavers, shepherd's purse, cow cockle, nightflowering catchfly, stork's-bill, flixweed, narrow-leaved hawk's beard	A second application may be used for late weed flushes emerging after the initial treatment.  This second application must be made no later than the 8 leaf stage of the corn.
2.5		Common milkweed, yellow nutsedge, roundleaved mallow, field bindweed	For control of common milkweed, yellow nutsedge, roundleaved mallow and field bindweed use two applications of 2.5 L/ha. This second application must be made no later than the 8 leaf stage of the corn. Milkweed should be 15-60 cm in height and actively growing. Yellow nutsedge should be 5-15 cm in height and actively growing.

2.5 GF-772 Herbicide+ 0.75–1.0 kg ai/ha atrazine <sup>††</sup>	Up to and including 5th leaf stage.	Perennial sow thistle, Canada thistle, wire-stemmed muhly  Residual control of lamb's-quarters, redroot pigweed, common ragweed	A second (sequential) application of 2.5 L/ha will improve control in heavy weed infestations.  If sequential applications are used they should be at least 2 weeks apart for best results on perennial weeds.  This second application must be made no later than the 8 leaf stage of the corn.  Perennial sow thistle and Canada thistle should be from the rosette stage to 50 cm in height and actively growing.  Wire-stemmed muhly should be 10-20 cm in height and actively growing.  Plants not fully emerged at the time of application will escape treatment.  Tank mix should be used when only a single application timing is desired. Use higher rate of atrazine for heavier weed infestations.
2.5 GF-772 Herbicide + 2.5-3.7 Marksma n Herbicide	Up to and including 5th leaf stage.	Residual control of lamb's-quarters, redroot pigweed, common ragweed, velvetleaf	Tank mix should be used when only a single application timing is desired. Use higher rate Marksman Herbicide for heavier weed infestations.

<sup>&</sup>lt;sup>††</sup> 0.75-1.0 kg ai atrazine/ha is equivalent to 1.56-2.08 L/ha of Aatrex Liquid 480™

<sup>†</sup>Weeds will be more easily controlled and early crop competition avoided with applications made when the weeds are small. Control of weeds greater than 25 cm in height will be inconsistent, although some weeds may be controlled.

# **GF-772 Herbicide plus Assure II Tank Mixture**

For control of volunteer glyphosate tolerant corn, Assure II Herbicide may be tank mixed with GF-772 Herbicide. Use 2.5 - 5 litres per hectare GF-772 Herbicide and 0.38 litres per hectare of Assure II Herbicide.

Apply in 100 – 300 litres per hectare of clean water.

Mixing: Add and mix Assure II Herbicide as per instructions on the Assure II Herbicide label and then add GF-772 Herbicide as per instructions on this label.

This tank mix is to be applied when the crop is from the first trifoliate leaf stage through flowering and when the volunteer glyphosate tolerant corn is at the 2-6 leaf stage.

A PHI (preharvest interval) of 80 days is required for the tank mix of GF-772 Herbicide and Assure II Herbicide on glyphosate tolerant soybeans.

Refer to the Assure II Herbicide label for further safety precautions and handling

#### SPRAY BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a spray buffer zone: hand-held or backpack sprayer and spot treatment, inter-row hooded sprayer, low-clearance hooded or shielded sprayers that ensure spray drift does not come in contact with orchard crop fruit or foliage, soil drench and soil incorporation.

For application to rights-of-way and for forestry uses, spray buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which minimize off-site drift, including meteorological conditions (for example, wind direction, low wind speed) and spray equipment (for example, coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified spray buffer zones for protection of sensitive aquatic habitats.

The spray 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	Сгор	Maximum number of applications	Spray Buffer Zones (metres) required for protection of:					
			Aquatic Habitat	Terrestrial Habitat				
Agricultural and non-cropland systems								
Agricultural crop system and ground boom application method	Pre-seeding applications for rye, cranberry, filberts, hazelnut and all other crops only. Established pasture and summer fallow. Ginseng new garden	1	1	1				
	Ginseng - existing established garden,	2	1	1				
	Filberts or hazelnut	4	1	1				
	Corn (glyphosate non-tolerant varieties including grain, silage and ornamental types), sugar beet (glyphosate non-tolerant varieties), strawberry, blueberry highbush and lowbush, walnut, chestnut, Japanese heartnut, Turf grass (prior to establishment or renovation)	2	1	2				
	Wheat, barley, oats, soybean (glyphosate non-tolerant varieties), canola (glyphosate non-tolerant varieties), peas, dry beans, flax (including low linoleic acid varieties), lentils, chickpea, asparagus, corn (glyphosate tolerant varieties), forage grasses and legume including seed production	3	1	2				
	Canola (glyphosate tolerant varieties), soybean (glyphosate tolerant varieties)	4	1	2				
	Apple, apricot, cherry (sweet/sour), peaches, pears, plums, grapes	3	1	3				
Agricultural crop	Pasture	1	20	30				
system and airblast application method (including mist blower)	Turfgrass (Prior to establishment or renovation)	2	25	35				

Forest plant	Forest and woodlands > 500 ha		2	1	NR
system and					
ground boom	Site preparation				
application method					
	Forest and woodlands > 500 ha		2	1	NR
Forest plant system and	Forest and Woodlands > 500 na	2	ı	INF	
airblast	Site preparation				
application	Che proparation				
method (including					
mist blower)					
Non-cropland	Non-crop land and industrial use:	3	1	3*	
system and	Industrial and rights of way areas				
ground boom	Recreational and public areas				
application method					
Non-cropland	Non-crop land and industrial use	3	20	30*	
system and	Industrial and rights of way areas	3	20	30	
airblast	Recreational and public areas				
application	'				
method (including					
mist blower)					
Agricultural crop	Wheat, barley, oats, soybean	Fixed	2	20	35
system and aerial	(glyphosate non-tolerant varieties), canola (glyphosate	wing			
application method		Rotary	2	20	30
metriod	non-tolerant varieties), peas, dry beans, flax (including low	wing			
	linoleic acid varieties), lentils	Rotary	1	20	40
		wing	·		.0
Forestry system	Forest and woodlands >500 ha	Fixed	2	20	NR
and aerial		wing			
application	Site preparation	Rotary	2	10	NR
method		wing		_	
	Forest and woodlands <500 ha	Fixed	2	5	NR
	Site proporation	wing	2	1	NR
	Site preparation	Rotary wing	2	ı	INF
Non-cropland	Non-crop land and industrial	Fixed	3	100	NR
system and aerial	uses: rights-of way areas only	wing	•		
application		Rotary	3	60	NR
method		wing			

<sup>\*</sup> Spray buffer zones for the protection of terrestrial habitats are not required for forestry uses or for use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements and roads.

# NR = Not Required

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray 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 Spray Buffer Zone Calculator on Pesticide portion of the Canada.ca web site.

# RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, GF-772 Herbicide is a Group 9 herbicide. Any weed population may contain or develop plants naturally resistant to GF-772 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 GF-772 Herbicide or other Group 9 herbicides within a growing season (sequence) or among growing seasons 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. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.
- Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weedcompetitive crops or varieties) and other management practices.
- Monitor weed populations after herbicide application for signs of resistance development (for
  example, only one weed species on the herbicide label not controlled). If resistance is suspected,
  prevent weed seed production in the affected area if possible by an alternative herbicide from a
  different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting
  and tillage equipment when moving between fields, and planting clean seed.
- Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.
- 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 Albaugh LLC at 1-800-247-8013.

**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.