2017-3576
2018-05-11

[*container/stay-behind label*]

GROUP	9	HERBICIDE

GLYFOS® BIO
Herbicide

SOLUTION

AGRICULTURAL AND INDUSTRIAL

CAUTION - EYE IRRITANT

NET CONTENTS: 5 L -

ACTIVE INGREDIENT: glyphosate (present as isopropylamine salt)…….360 g/L

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

REGISTRATION NO. 29363 PEST CONTROL PRODUCTS ACT

EMERGENCY TELEPHONE NUMBER

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-331-3148

NET CONTENTS: 5 L - Bulk

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104 USA
1-800-33-3148

PRECAUTIONS

- KEEP OUT OF REACH OF CHILDREN
- CAUSES EYE IRRITATION
- AVOID CONTACT WITH EYES AND SKIN
- WASH HANDS AND EXPOSED SKIN BEFORE EATING, DRINKING, OR SMOKING, AND AFTER WORK

If

PRECAUTIONS FOR USE

Avoid contact with desirable vegetation by direct application or spray drift as severe injury or destruction may result. Avoid drift or overspray to non-target vegetation and wildlife habitats.

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

DO NOT USE IN GREENHOUSES.

Drain and clean sprayer and parts immediately after using this product.
Do not contaminate water sources by disposal of wastes or cleaning of equipment.
Reduced results may occur if water containing soil is used such as water from ponds and ditches. Poor control may also occur when treating weeds heavily covered with dust.

FOR GOOD AGRICULTURAL PRACTICE:

- DURING MIXING, LOADING, CLEANUP, AND REPAIR PROCEDURES WEAR GLOVES, COVERALLS, AND EYE PROTECTION
- WASH SPLASHES FROM SKIN AND EYES IMMEDIATELY

FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
IN CASE OF CONTACT WITH 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.
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.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

EMERGENCY TELEPHONE NUMBER
IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-331-3148.

TOXICOLOGICAL INFORMATION

Treat symptomatically. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

ENVIRONMENTAL HAZARDS

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

- Avoid direct application to any body of water populated with fish or used for domestic purposes.
- Do not use in areas where adverse impact on domestic water or aquatic species is likely.
- Do not contaminate water by disposal of waste or cleaning of equipment.
- To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil or clay.
- Avoid application when heavy rain is forecast.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.
- Avoid all drift or contact with vegetation for which treatment is not intended as damage or destruction may occur.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fibreglass, plastic, or plastic-lined 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 the 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.

STORAGE

KEEP AWAY FROM FOOD, DRINK, AND ANIMAL FEEDSTUFFS. KEEP ONLY IN ORIGINAL CONTAINER, TIGHTLY CLOSED.

DISPOSAL

RECYCLABLE CONTAINERS:

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

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

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

For 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 spill, and for clean-up of spills.

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).

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 spill, and for clean-up of spills.

RETURNABLE 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 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.

[Booklet]

GROUP	9	HERBICIDE

GLYFOS® BIO
Herbicide

SOLUTION

AGRICULTURAL AND INDUSTRIAL

CAUTION - EYE IRRITANT

ACTIVE INGREDIENT: glyphosate (present as isopropylamine salt)…….360 g/L

READ THE LABEL AND ATTACHED BOOKLET BEFORE USING

REGISTRATION NO. 29363 PEST CONTROL PRODUCTS ACT

EMERGENCY TELEPHONE NUMBER

IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-331-3148

NET CONTENTS: 5 L - Bulk

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104 USA
1-800-33-3148

GLYFOS BIO HERBICIDE - LABEL INDEX

READ ENTIRE LABEL CAREFULLY BEFORE USE

GLYFOS BIO HERBICIDE is a non-selective, non-residual herbicide containing 360 g/L glyphosate as isopropylamine salt, formulated as a water soluble liquid. It is used for the control of most herbaceous weeds in agricultural and industrial sites. The product is absorbed through the foliage and translocated throughout the plant down to the root system. Visible symptoms such as gradual wilting and yellowing are usually obvious within 2 to 4 days of application to annual weeds, but may not be apparent for 7 to 10 days on perennial weeds.

PRECAUTIONS

- KEEP OUT OF REACH OF CHILDREN
- CAUSES EYE IRRITATION
- AVOID CONTACT WITH EYES AND SKIN
- WASH HANDS AND EXPOSED SKIN BEFORE EATING, DRINKING, OR SMOKING, AND AFTER WORK

PRECAUTIONS FOR USE

Avoid contact with desirable vegetation by direct application or spray drift as severe injury or destruction may result. Avoid drift or overspray to non-target vegetation and wildlife habitats.

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

DO NOT USE IN GREENHOUSES.

Drain and clean sprayer and parts immediately after using this product.
Do not contaminate water sources by disposal of wastes or cleaning of equipment.
Reduced results may occur if water containing soil is used such as water from ponds and ditches. Poor control may also occur when treating weeds heavily covered with dust.

FOR GOOD AGRICULTURAL PRACTICE:

- DURING MIXING, LOADING, CLEANUP, AND REPAIR PROCEDURES WEAR GLOVES, COVERALLS, AND EYE PROTECTION
- WASH SPLASHES FROM SKIN AND EYES IMMEDIATELY

FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give **any** liquid to the person. Do not give anything by mouth to an unconscious person.
IN CASE OF CONTACT WITH 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.
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 further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

EMERGENCY TELEPHONE NUMBER
IN CASE OF A MEDICAL EMERGENCY INVOLVING THIS PRODUCT, CALL TOLL FREE, DAY OR NIGHT, 1-800-331-3148.

TOXICOLOGICAL INFORMATION

Treat symptomatically. This product contains petroleum distillates. Vomiting may cause aspiration pneumonia.

ENVIRONMENTAL HAZARDS

- TOXIC to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE**.**
- Avoid direct application to any body of water populated with fish or used for domestic purposes.
- Do not use in areas where adverse impact on domestic water or aquatic species is likely.
- Do not contaminate water by disposal of waste or cleaning of equipment.
- To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil or clay.
- Avoid application when heavy rain is forecast.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.
- Avoid all drift or contact with vegetation for which treatment is not intended as damage or destruction may occur.

PHYSICAL OR CHEMICAL HAZARDS

Spray solutions of this product should be mixed, stored and applied only in stainless steel, aluminum, fibreglass, plastic, or plastic-lined 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 the 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.

STORAGE

KEEP AWAY FROM FOOD, DRINK, AND ANIMAL FEEDSTUFFS. KEEP ONLY IN ORIGINAL CONTAINER, TIGHTLY CLOSED.

DISPOSAL/DECONTAMINATION

RECYCLABLE CONTAINERS:

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

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

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

For 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 spill, and for clean-up of spills.

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).

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 spill, and for clean-up of spills.

RETURNABLE 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 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.

GENERAL PRODUCT INFORMATION

GLYFOS BIO HERBICIDE is a water soluble herbicide for non-selective weed control. GLYFOS BIO HERBICIDE is applied as a foliar spray for the control of most herbaceous plants. It may be applied through most standard industrial or field type sprayers after dilution and thorough mixing with water inaccordance with the booklet instructions.

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

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

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

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.

GENERAL APPLICATION NOTES

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

Delay application until vegetation has emerged to the stage described for the control of such vegetation under the **ANNUAL** and **PERENNIAL WEED CONTROL** charts of this booklet to provide adequate leaf surface to receive the spray. Unemerged plants arising from underground rhizomes or root stocks of perennials will not be affected by the spray and will continue to grow. For this reason best control of most perennial weeds is obtained when the treatment is made at the late growth stages approaching maturity. Always use higher rates of GLYFOS BIO HERBICIDE per hectare within the recommended range when weed growth is heavy or dense or weeds are growing in an undisturbed (non-cultivated) area.

Weed control may not be satisfactory if this product is applied to weeds growing under poor growing conditions such as drought, flooding, frost, high temperatures, disease or insect damage. Reduced results may also occur when treating weeds heavily covered with dust.

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

GLYFOS BIO HERBICIDE should only be mixed with products recommended on this label. Do not mix with any surfactant, pesticide, herbicide oils or any other material other than water unless specified.

TANK MIXES

GLYFOS BIO HERBICIDE may be used with the following surfactants: *Agral 90®, AgSurf®, Companion™*. See charts on **TANK MIXES for ANNUAL** and **for PERENNIAL WEED CONTROL.**

GLYFOS BIO HERBICIDE may be used with the following herbicides: *Banvel®, Oracle®, Express® Toss-N-Go Herbicide (Reg. No. 27532) or Express 50 SG Herbicide (Reg. No. 28262), Pardner®,Pursuit®, 2,4-D low volatile ester or amine formulations:* See section on **MINIMUM AND ZERO TILLAGE** TANK MIXES.

Princep® Nine-T®, Simadex®: See section on **TREE, VINE, AND BERRY CROPS.**
DyCleer® Herbicide, Simazine 80W, Simadex® Flowable, 2,4-D amine: See section on **NONCROPLAND AND INDUSTRIAL USES.**

Always refer to the surfactant and herbicide labels for specific instructions regarding the use of that product.

Trade Name	Trademark of
Agral, DyCleer, Frigate, Princep, Nine-T	Syngenta
AgSurf	IPCO
Banvel, Pursuit	BASF
Companion	Dow AgroSciences Canada Inc.
Pardner, Simadex	Bayer CropScience
Oracle	Gharda

Trade Name	Trademark of
Agral, DyCleer, Princep, Nine-T AgSurf	Syngenta IPCO
Banvel, Pursuit Companion	BASF
Pardner, Simadex Oracle	Dow AgroSciences Canada Inc. Bayer CropScience
Express	Gharda
	E.I. duPont de Nemours and Company

VEGETATION CONTROLLED

GLYFOS BIO HERBICIDE controls many annual and perennial grasses, broadleaf weeds and woody brush and trees when applied as recommended and under the conditions described. For information on how to control specific weeds, including herbicide rate, refer to the **ANNUAL WEED CONTROL** and **PERENNIAL WEED CONTROL** charts of this label. The following is a partial list of the weeds controlled:

Annual weeds:

Annual bluegrass	*Poa annua*
Annual sowthistle	*Sonchus oleraceus*
Chickweed	*Stellaria media*
Cleavers	*Galium aparine*
Cocklebur	*Xanthium strumarium*
Common lamb's quarters	*Chenopodium album*
Common ragweed	*Ambrosia artemisiifolia*
Corn spurry	*Spergula arvensis*
Crab grass (large)	*Digitaria sanguinalis*
Crab grass (smooth)	*Digitaria ischaemum*
Cow cockle	*Saponaria vaccaria*
Dodder	*Cuscuta spp.*
Downy brome	*Bromus tectorum*
Eastern black flowering nightshade	*Solanum ptycanthum*
Fall panicum	*Panicum dichotomiflorum*
Fleabane (Canada)	*Erigeron canadensis*
Flixweed	*Descurainia sophia*
Giant foxtail	*Setaria faberii*
Green foxtail	*Setaria viridis*
Green smartweed	*Polygonum scabrum*
Hempnettle	*Galeopsis tetrahit*
Kochia	*Kochia scoparia*
Lady's thumb	Polygonum persicaria
Narrow-leaf hawk's beard	*Crepis tectorum*
Narrow-leaf vetch	*Vicia angustifolia*
Night-flowering catchfly	*Silene noctiflora*
Pennsylvania smartweed	*Polygonum pensylvanicum*
Persian darnel	*Lolium persicum*
Prickly lettuce	*Lactuca serriola*
Redroot pigweed	*Amaranthus retroflexus*
Roundleaf mallow	*Malva pusilla*
Russian thistle	*Salsola pestifer*
Shepherd's purse	*Capsella bursa-pastoris*
Smooth pigweed	*Amaranthus hybridus*
Stinkweed	*Thlaspi arvense*
Storksbill	*Erodium cicutarium*
Velvetleaf	*Abutilon theophrasti*
Volunteer barley	*Hordeum spp.*
Volunteer canola	*Brassica spp.*
Volunteer corn	*Zea mays*
Volunteer flax	*Linum spp.*
Volunteer wheat	*Triticum spp.*
Wild buckwheat	*Polygonum convolvulus*
Wild mustard	*Sinapsis arvensis*
Wild oats	*Avena fatua*
Wild proso millet	*Panicum miliaceum*
Wild tomato	*Solanum triflorum*
Yellow foxtail	*Setarium glauca*

Perennial weeds:

Alfalfa	*Medicago savita*
Bluegrass (Canada)	*Poa compressa*
Bluegrass (Kentucky)	*Poa pratensis*
Brome grass (smooth)	*Bromus inermis*
Canada thistle	*Cirsium arvense*
Common cattail	*Typha latifolia*
Common milkweed	*Asclepias syriaca*
Cottontop	*Eriophorum chamissonis*
Curled dock	*Rumex crispus*
Dandelion	*Taraxacum officinale*
Field bindweed	*Convolvulus arvensis*
Foxtail barley	*Hordeum jubatum*
Hemp dogbane	*Apocynum cannabinum*
Hoary cress	*Cardaria draba*
Japanese knotweed	*Polygonum cuspidatum*
Perennial sowthistle	*Sonchus arvensis*
Poison ivy	*Rhus radicans*
Purple loosestrife	*Lythrum salicaria*
Quackgrass	*Elytrigia repens*
Toad flax	*Linaria vulgaris*
Wire-stemmed muhly	*Muhlenbergia frondosa*
Wormwood (Absinth)	*Artemisia absinthium*
Yellow nutsedge	*Cyperus esculentus*

Woody weeds, brush, and trees:

Alder	*Alnus spp.*
Birch	*Betula spp.*
Broadleaf meadowsweet	*Spiraea latifolia*
Canadian rhododendron	*Rhododendron canadense*
Cedar	*Thuja spp.*
Cherry	*Prunus spp.*
Douglas fir	*Pseudotsuga spp.*
Hemlock	*Tsuga spp.*
Maple	*Acer spp.*
Mountain-fly honeysuckle	*Lonicera Villosa*
Pine	*Pinus spp.*
Poplar	*Populus spp.*
Raspberry	*Rubus spp.*
Salmonberry	*Rubus spectabilis*
Sheep laurel	*Kalmia angustifolia*
Snowberry (western)	*Symphoricarpos occidentalis*
Sweet fern	*Comptonia peregrina*
Willow	*Salix spp.*
Withrod	V*iburnum cassinoides*

RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, GLYFOS BIO HERBICIDE is a Group 9 herbicide. Any weed population may contain or develop plants naturally resistant to GLYFOS BIO 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 GLYFOS BIO 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 (weed-competitive 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 FMC Corporation at 1-800-**

331-3148 or at www.fmccrop.ca.APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS

GROUND BOOM AND BOOMLESS SPRAYERS

Mixing: For field or industrial type sprayers, fill the spray tank with one-half the required amount of water. Add the proper amount of GLYFOS BIO HERBICIDE (see appropriate chart) and mix well before adding the remaining portion of water. Placing the filling hose below the surface of the liquid solution will prevent any excessive foaming. Remove the hose from the tank immediately after filling to avoid back siphoning into water source (a one-way valve should be installed to prevent back siphoning). Use of mechanical agitators may cause excessive foaming. By-pass lines should terminate at the bottom of the tank.

Application: Use flat fan nozzles in boom sprayers. To control perennial weeds, woody brush, and trees as listed, apply GLYFOS BIO HERBICIDE in 50 to 300 L of water per hectare as a broadcast spray. Use no more than 275 kPa pressure.

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

KNAPSACK SPRAYERS, HAND HELD & HIGH VOLUME EQUIPMENT

High volume spraying utilizes handguns or other suitable nozzle arrangements to apply a **directed spray** to weeds, woody brush, and trees. Use coarse sprays only.

Mixing: Mix the proper amount of GLYFOS BIO HERBICIDE with water in a large container. Fill the sprayer with the mixed solution. Unless otherwise stated, make a 1% solution of GLYFOS BIO HERBICIDE in water (1 L of GLYFOS BIO HERBICIDE in 100 L of water). A 2% solution (2 L of GLYFOS BIO HERBICIDE in 100 L of water) should be used on harder to control perennials.

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

MIST BLOWERS

For control of woody weeds, brush, and trees listed in the **VEGETATION CONTROLLED** lists, use the recommended rate of GLYFOS BIO HERBICIDE in at least 200 L of water per hectare.

WIPER, WICK AND ROLLER EQUIPMENT

These applicators apply GLYFOS BIO HERBICIDE solution directly onto the weeds by contacting the weed with an absorbent material containing the herbicide solution. Weeds should be a minimum of 15 cm above the desired vegetation to prevent contact of GLYFOS BIO HERBICIDE with the desired vegetation.
Mixing: Mix the proper amount of GLYFOS BIO HERBICIDE with water in a large container. Use this mixed solution in the wiper, wick or roller equipment.
Application: These applicators can be used to control weeds in:

- Industrial sites, tree plantings, and non-crop sites as specified.
- The following agricultural crops:
  apple, cherry, peach, pear and plum orchards, grape vineyards, soybeans, dry beans, strawberries, and cranberries (note: applications must be made before initial pod set in soybeansand dry beans).

The applicator should be adjusted so that the contact point of the wiper, roller, or wick is at least 5 cm above the desirable vegetation. Droplets or foam of the GLYFOS BIO HERBICIDE solution settling on desirable vegetation may result in discoloration, stunting or destruction.
Best results are obtained when more of the weed is exposed to the herbicide solution. It is recommended that two applications be made in opposite directions, if possible.
Weeds not contacted will not be affected. This may occur in dense clumps, severe infestation, or when the height of the weeds varies so that not all weeds are contacted. In these instances, a repeat treatment may be necessary.
AVOID CONTACT WITH DESIRABLE VEGETATION

Wiper, Wick, Roller Application Notes:

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

AERIAL APPLICATION

Directions for Use (for additional information see section on AERIAL APPLICATIONS: For industrial rights-of-way only)

Apply only by fixed-wing and 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.

Ensure that the maximum boom width does not exceed 65% of the wing span. Nozzle type, size and orientation must be configured to deliver a droplet size VMD in the coarse (400-600 microns) or very coarse (600-1000) range. Label rates, conditions and precautions are product specific. Read and understand the entire label before opening this product. Apply only at the rate 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. The use of a spotter plane is recommended.

Aerial Use Precautions
Apply only when weather 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 *Basic Knowledge Requirements for Pesticide Education in Canada: Applicator Core and Aerial Module,* developed by CAPCO (Canadian Association of Pest Control Officials).
Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.
Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

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.

Product-Specific Precautions
Read and understand the entire label before opening this product. If you have questions, call the manufacturer at 1-800-331-3148, 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 a spray volume of 30-100 L/ha.
Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of GLYFOS BIO HERBICIDE 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.

DIRECTIONS FOR USE

GLYFOS BIO HERBICIDE is not to be applied using hand-wicking or hand-daubing methods.

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

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

Restricted Entry Interval: The restricted entry interval is 12 hours after application for all agricultural uses.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product

when winds are gusty. **DO NOT** apply with spray droplets smaller than the Ame1ican Society of Agricultural Engineers (ASAE S572. l) coarse classification. Boom height must be 60 cm or less above the crop or ground.

Airblast or mist blower application: **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, tum off outward pointing nozzles at row ends and outer rows.

Aerial application: **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. l) 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.

BUFFER ZONES

Use of the following spray methods or equipment **DO NOT** require a 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, buffer zones for protection of sensitive terrestrial habitats are not required; however, the best available application strategies which minimize off-site d1ift, including meteorological conditions (e.g.,wind direction, low wind speed) and spray equipment (e.g., coarse droplet sizes, minimizing height above canopy), should be used. Applicators must, however, observe the specified buffer zones for protection of sensitive aquatic habitats.

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

Use	Wing Type	Maximum Number of Applications	Buffer Zone	
			Aquatic Habitats	Terrestrial Habitats
Agricultural crop system and ground boom application				
Pre-seeding applications for cranberry, filberts, hazelnut and all other crops. Established pasture and summer fallow.	N/A	1	1	1
Canola – Roundup Ready hybrid for seed production	N/A	2	1	1
Filberts or hazelnuts, sugar beets (glyphosate tolerant varieties)	N/A	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, turf grass (prior to establishment or renovation)	N/A	2	1	2
Wheat, barley, oats, soybean (glyphosate-tolerant	N/A	3	1	2

Use	Wing Type	Maximum Number of Applications	Buffer Zone	
			Aquatic Habitats	Terrestrial Habitats
varieties), corn-sweet (glyphosate tolerant varieties), canola (glyphosate non-tolerant varieties), peas, dry beans, flax (including low linoleic acid varieties), lentils, corn (glyphosate tolerant varieties), forage grasses and legume including seed production				
Canola (glyphosate tolerant varieties), soybean (gl yphosate tolerant varieties)	N/A	4	1	2
Apple, apricot, cherry (sweet/sour), peaches, pears, plums, grapes	N/A	3	1	3
Agricultural crop system and airblast application method (including mist blower)				
Pasture	N/A	1	20	30
Turf grass (Prior to establishment or renovation)	N/A	2	25	35
Non-cropland system and ground boom application method				
Non-crop land and industrial uses: Industrial and rights of way areas, Recreational and public areas	N/A	3	1	3
Non-cropland system and airblast application method (including mist blower)				
Non-crop land and industrial uses: Industrial and rights of way areas, Recreational and public areas	N/A	3	20	30
Agricultural crop system and aerial application methods				
Wheat, barley, oats, soybean (glyphosate non-tolerant), canola (glyphosate non-tolerant varieties), peas, dry beans, flax (including low linoleic acid varieties), lentils	Fixed wing	2	20	35
	Rotary wing	2	20	30
Non-cropland system and aerial application method				
Non-crop land and industrial uses: rights of way areas only	Fixed wing	3	100	NR*
	Rotary wing	3	60	NR*

*Buffer zones for the protection of terrestrial habitats are not required for the use on rights-of-way including railroad ballast, rail and hydro rights-of-way, utility easements and roads

NR = Not Required. .

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

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

AGRICULTURAL AND CROPLAND USES

The following are use situations for GLYFOS BIO HERBICIDE. The type of vegetation present and the

use situation will dictate the choice of application equipment. Information on the equipment selected to apply GLYFOS BIO HERBICIDE can be found in the **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section. Use rates can then be selected from the **ANNUAL** and **PERENNIAL WEED CONTROL** charts.

PREPLANT TREATMENT
GLYFOS BIO HERBICIDE can be applied prior to planting of all crops for control of emerged weeds listed on the label. Ensure weeds are at the recommended growth stage at the time of application. Apply BEFORE seeding or transplanting crop.

SUMMER FALLOW
GLYFOS BIO HERBICIDE may be applied in summer fallow to control weeds listed on the label. Ensure weeds are at the recommended growth stage and actively growing at the time of application. Reduced control may result if weeds are drought stressed. Repeat treatments may be necessary to control later germinating weeds.

MINIMUM AND ZERO TILLAGE SYSTEMS (ALL FIELD CROPS INCLUDING CEREALS, OILSEEDS, PULSES, FORAGES AND CORN)
GLYFOS BIO HERBICIDE may be applied before or after seeding but before crop emerges for control of emerged weeds in minimum and zero tillage cropping systems for all field crops. Weeds should betreated at the growth stage according to the **ANNUAL** and **PERENNIAL WEED CONTROL** charts.
DO NOT APPLY AFTER CROP EMERGENCE.
Since GLYFOS BIO HERBICIDE does not provide residual control, application too far in advance of seeding may allow weeds to germinate between application and crop emergence.

MINIMUM AND ZERO TILLAGE TANK MIXES
GLYFOS BIO HERBICIDE plus Pardner (bromoxynil) can be applied prior to seeding or after seeding, but before crop emergence in **wheat, barley, and oats.** See chart on **TANK MIXES for ANNUAL WEED CONTROL.**

GLYFOS BIO HERBICIDE plus Pursuit can be applied before or after seeding, but prior to crop emergence in **soybeans**. GLYFOS BIO HERBICIDE will control emerged weeds listed on this label when applied as directed (see **VEGETATION CONTROLLED** lists). 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.
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.

GLYFOS BIO HERBICIDE TANK MIXES for ANNUAL WEED CONTROL SUMMER FALLOW & MINIMUM TILLAGE SYSTEMS

TANK MIXTURES	RATE L/ha	WEEDS CONTROLLED++	**COMMENTS:** Apply in 50-100 L/ha water; add 350 mL/ha surfactant(see **NOTE** below)
GLYFOS BIO HERBICIDE + +	0.75 - 1.0 + 0.29	Volunteer cereals, wild oats, green foxtail, volunteer canola (rapeseed), wild mustard, flixweed*, lamb's quarters,	**This tank mix for summer fallow use only.** Weeds should be less than 15 cm tall and actively growing. Use higher rate if weeds are taller than 8 cm.

TANK MIXTURES	RATE L/ha	WEEDS CONTROLLED++	**COMMENTS:** Apply in 50-100 L/ha water; add 350 mL/ha surfactant(see **NOTE** below)
Banvel or Oracle		lady's thumb, stinkweed, kochia, Russian thistle, cow cockle Redroot pigweed**, wild buckwheat**	*GLYFOS BIO HERBICIDE applied at 1.0 L/ha rate only. **Suppression only. See other tank mixtures for control options.
GLYFOS BIO HERBICIDE + Pardner	0.75 - 1.0 + 1.25	Volunteer cereals, green foxtail, volunteer canola (rapeseed), wild mustard, lady's thumb, stinkweed, wild buckwheat* Redroot pigweed**, kochia**, wild oats**	**This tank mix for summer fallow use; and prior to planting wheat, oats, and barley in minimum tillage systems.** Weeds should be less than 15 cm tall and actively growing. Use higher rate if weeds are taller than 8 cm. *Use GLYFOS BIO HERBICIDE at 1.0 L/ha rate for wild buckwheat control. **1.0 L rate, suppression only. See other tank mixtures for control options.
GLYFOS BIO HERBICIDE + 2,4-D[1]	0.75 - 1.0 + 1.2	Volunteer cereals, wild oats*, green foxtail*, volunteer canola (rapeseed), wild mustard, flixweed, redroot pigweed, lady's thumb, stinkweed, kochia Lamb's quarters**, Russian thistle**	**This tank mix for summer fallow use only.** Weeds should be less than 15 cm tall and actively growing. Use higher rate if weeds are taller than 8 cm. *Use GLYFOS BIO HERBICIDE at 1.0 L/ha rate only for wild oat and green foxtail control. **Suppression only. See other tank mixtures for control options.
GLYFOS BIO HERBICIDE + Express Toss-N-Go Herbicide (75%) Or Express SG (50%)	1.25 – 1.85 10 g/ha (7.5 g ai/ha) 15 g/ha (7.5 g ai/ha)	Volunteer cereals, cow cockle, wild buckwheat, Canada fleabane, common ragweed, narrow-leaved hawk's beard, downybrome, flixweed, giant foxtail, green foxtail, hempnettle, kochia, lady's thumb, lamb's quarters, Persian darnel, redrootpigweed, Russian thistle,stinkweed, volunteer canola, volunteer flax, wild mustard, wild oats.	Use this tank mix in summer fallow or prior to seeding wheat andbarley. Refer to Express Toss-N-Go label for the appropriate weed growth stage. Refer to the Express label forspecific tank mixing instructions, as well as tank cleaning information.

[1]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.

++ For foxtail barley suppression, refer to chart on **ANNUAL WEED CONTROL.**

NOTE: All GLYFOS BIO HERBICIDE tank mixtures for annual weed control require the addition of a non-ionic surfactant registered for this use, such as Agral 90, AgSurf and Companion. Surfactant should be added at a rate of 350 mL per hectare in 50-100 L of clean water.

GLYFOS BIO HERBICIDE TANK MIXES for PERENNIAL WEED CONTROL SUMMER FALLOW OR

FALL STUBBLE

TANK MIXTURES	RATE L/ha	WEEDS CONTROLLED	COMMENTS: Apply in 100-200 L/ha water; add 350 mL/ha surfactant (see NOTE below)
GLYFOS BIO HERBICIDE + Banvel or Oracle	1.7 + 1.25	Canada thistle, perennial sow thistle	**Summer fallow:** Cultivate in the spring and apply when majority of thistles are 15 to 25 cm tall, and before the bud stage. Cultivate 3 weeks after application. **Fall stubble:** Apply to actively growing thistles at least 2 weeks prior to a killing frost.
GLYFOS BIO HERBICIDE + Express Toss-N-Go Herbicide (75%) Or Express SG (50%)	1.25 – 1.85 10 g/ha (7.5 g ai/ha) 15 g/ha (7.5 g ai/ha)	Canada thistle (suppression), dandelion.	Use this tank mix in summer fallow or prior to seeding wheat and barley. Refer to Express Toss-N-Go label for the appropriate weed growth stage. Refer to the Express label for specific tank mixing instructions, as well as tank cleaning information.
NOTE: All GLYFOS BIO HERBICIDE tank mixtures for perennial weed control require the addition of a non-ionic surfactant registered for this use, such as Agral 90, AgSurf, or Companion. Grow only cereals, canola (including rapeseed), soybeans, field corn, sweet corn, or white beans after application of this tank mix. If application is made after September 1st, or if soil moisture levels are extremely low after application, crop injury may occur in the spring following application.			

FALL STUBBLE

Apply in the fall as a postharvest stubble treatment for control of perennial weeds including quackgrass and Canada thistle. Allow the Canada thistle and quackgrass to regrow to 20-25 cm tall. Straw should be removed or evenly spread to allow for proper regrowth and spray coverage. Heavy frost prior to treatment may decrease control.

SPOT TREATMENT (IN CROP)

GLYFOS BIO HERBICIDE may be applied for the control of Canada thistle, quackgrass and other perennial weeds in forage crops, barley, wheat, oats, soybeans and legumes, including seed production. Treatments may be made up to heading of small grain, initial pod set on soybeans and legumes, silking of corn, and emergence of seed heads. Avoid drift beyond the treated area.

Application can be made using a boom sprayer, knapsack, or high volume equipment (see **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section). Applications should be made using the same growth stages as listed in the **ANNUAL** and **PERENNIAL WEED CONTROL** charts. Or, use a 1% solution for annual weeds and quackgrass and a 2% solution for other perennial weeds (a 1% solution equals 1 litre GLYFOS BIO HERBICIDE in 100 litres of spray solution). The 1% and 2% solutions should be applied to wet, but not to run off.

NOTE: THE CROP IN THE TREATED AREA WILL BE KILLED BY THE TREATMENT.

DO NOT APPLY IF CROP GROWTH HAS ADVANCED BEYOND SEED SET. ALLOW 3 TO 5 DAYS BEFORE GRAZING IN, OR HARVESTING TREATED AREAS AS FORAGES.

FORAGE GRASSES AND LEGUMES

Use GLYFOS BIO HERBICIDE to control or suppress existing vegetation prior to emergence of legumes

and grasses. If legumes and grasses are underseeded with a cover crop, GLYFOS BIO HERBICIDE must be applied prior to planting any cover crop.

PASTURE RENOVATION
GLYFOS BIO HERBICIDE may be used to control or suppress existing vegetation for zero tillage seeding of legume or grass pasture into established sod for renovation. Weed growth should be at least 20 cm high and most weed seeds should have germinated at the time of spraying.

FORAGE SEED PRODUCTION (FOR SPOT TREATMENT)
GLYFOS BIO HERBICIDE may be applied as a spot treatment for control of perennial weeds such as quackgrass and Canada thistle in seed fields. Apply to weeds at least 20-25 cm in height but before emergence of seed head.
The crop in the treated area will be killed. For this reason, take particular care to avoid drift outside the treated area.

PREHARVEST 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, GLYFOS BIO HERBICIDE can be applied prior to harvest of wheat, barley (including malting barley), oats, canola (rapeseed, including glyphosate tolerant varieties), flax (including low-linolenic acid varieties), lentils, peas, dry beans and soybeans. DO NOT apply to crops 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 THE ACTIVITY OF THIS PRODUCT, THEREBY DELAYING CROP DRYDOWN AND HARVEST DATE.
GLYFOS BIO HERBICIDE should be applied pre-harvest at 2.5 L/ha in 50 to 100 L/ha of clean water, by **GROUND APPLICATION ONLY.**

When to Apply: Apply only when the crop has 30% or less grain moisture content. This stage typically occurs 7 to 14 days before harvest. Consult the **GUIDELINES FOR TIMING OF PREHARVEST APPLICATIONS** chart for visible 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.
Use Precautions: Overspray or drift to important wildlife habitats such as bodies of water, wetlands (e.g., sloughs), shelterbelts, woodlots and other cover on the edges of fields frequented by wildlife, should be avoided. Leave a 15 metre buffer zone between the last spray swath and the edge of any of these habitats. Do not expose or contaminate any body of water or non-target vegetation by direct application, spray drift, or when cleaning and rinsing spray equipment.
DO NOT APPLY BY AIRCRAFT

GUIDELINES FOR TIMING OF PREHARVEST APPLICATIONS		
CROP(S)	**PERCENT GRAIN MOISTURE**	**VISIBLE SYMPTOMS**

WHEAT/BARLEY/ OATS	Less than 30	Hard dough stage; a thumbnail impression remains on seed.
CANOLA (including glyphosate tolerant varieties)	Less than 30	Pods are green to yellow; most seeds are yellow to brown.
FLAX (including low-linoleic acid varieties)	Less than 30	Majority (75%-80%) of bolls are brown.
FORAGES	Not applicable	Normal stage for forage harvesting.
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 (including glyphosate tolerant varieties)	Less than 30	Stems are green to brown in colour; pod tissue is dry and brown in appearance; 80%-90% leaf drop.

RESTRICTED USE

AERIAL PREHARVEST APPLICATION

FOR PRAIRIE PROVINCES ONLY (Including PEACE RIVER REGION OF B.C.) 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. 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 **Glyfos** aerial application training course.
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

Glyfos BIO 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.

Glyfos BIO Herbicide can be applied prior to harvest of wheat, barley (including malting barley), oats, canola (rapeseed), flax (including low-linoleic 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.

Glyfos BIO 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 **GUIDELINES FOR TIMING OF PREHARVEST APPLICATIONS** for visible 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.

USE PRECAUTIONS

AVOID DRIFT ON TO IMPORTANT WILDLIFE HABITATS. EXTREME CARE MUST BE TAKEN WHEN APPLYING THIS PRODUCT TO PREVENT INJURING DESIRABLE PLANTS AND CROPS.

Apply only in wind conditions in compliance with local and/or provincial regulations. Do not apply when other climatic conditions, including lesser wind velocities, will allow significant drift to occur.

Coarse sprays are less likely to drift, therefore do not use nozzles or nozzle configurations which disperse spray as fine spray droplets. Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure. See # 1 of the **NATURE OF RESTRICTION** section for additional details.

Do not overspray or allow drift on to bodies of water, wetlands† and/or wetland vegetation (e.g., sloughs, swamps, bogs, marshes, potholes), shelterbelts, woodlots and other cover on the edge of fields. IN ORDER TO REDUCE THE DRIFT HAZARD TO NON-TARGET PLANTS AND AQUATIC VEGETATION IN THE HABITATS LISTED ABOVE, DO NOT APPLY WITHIN 100 METRES OF THE EDGE OF ANY OF THESE HABITATS.

Do not apply directly to roadside ditches, or apply under conditions that would favour drift into roadside ditches.

†A wetland is any land where the water table stands at or above the land surface for at least part of the year, and contains vegetation associated with wetlands such as bulrushes, sedges, cattails, etc.

Ensure uniform application - To avoid streaked, uneven or overlapped application, use appropriate marking devices, or equivalent electronic positioning systems (GPS).

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 IS MOST SUSCEPTIBLE.

The maintenance of an organic coating (paint) which meets aerospace specification MIL-C-38412 may prevent corrosion.

TREE, VINE, AND BERRY CROPS

GLYFOS BIO HERBICIDE controls annual and perennial weeds in established vineyards or orchards, in blueberry, cranberry, strawberry and sugar beets, or for site preparation prior to transplanting tree or vine crops. See chart on **WEED CONTROL IN TREE, VINE, AND BERRY CROPS** for rate and time of application information.

This product does not provide residual or pre-emergent weed control. Repeat applications may be necessary to control weeds originating from underground parts of untreated weeds or from seeds. For subsequent weed control, follow a program using residual herbicides or use repeated applications of GLYFOS BIO HERBICIDE.

DO NOT APPLY MORE THAN 35 L OF GLYFOS BIO HERBICIDE PER HECTARE PER YEAR. EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF THE 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 MATURE BROWN BARK CAN RESULT IN SERIOUS CROP DAMAGE.

Allow annual and perennial weeds that have been mowed, grazed, or cut, time to regrow to recommended growth stage for treatment.

Applications may be made with boom sprayer, shielded sprayers, hand held and high volume orchard guns, or with wiper, wick, or roller equipment (orchards, vineyards, cranberry and strawberry only).

TREE PLANTING - Shelterbelts, Nursery Stock, Woody Ornamentals

GLYFOS BIO HERBICIDE may be applied to control annual and perennial weeds listed on this label. This may be used for site preparation prior to establishing plantations, or as a post directed spray in established plantations of the following species:

Deciduous	**Coniferous**
Ash - *Fraxinus spp.* Caragana - *Caragana spp.* Cherry - *Prunus spp.* Elm - *Ulmus spp.* Lilac - *Syringa spp.* Maple - *Acer spp.* Mountain ash - *Sorbus americana* Poplar - *Populus spp.* Russian olive - *Elaeagnus spp.* Willow - *Salix spp.*	Fir - *Abies spp.* Juniper - *Juniperus spp.* Pine - *Pinus spp.* Spruce - *Picea spp.* Yew - *Taxus spp.*

SPRAY MAY CONTACT MATURE BROWN BARK ONLY.

Avoid contact with non-target plants, foliage, or suckers of established plantations.

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.

FOR WEED CONTROL IN CHRISTMAS TREES (BALSAM FIR AND FRASER FIR) WITH A TANK MIX WITH 2,4-D AMINE 500 DIRECTIONS FOR USE:

Pests	**Annual weed species controlled by 1L/ha of GLYFOS BIO Herbicide.**
Site (Crop)	Christmas trees (Balsam fir and Fraser fir)
Method of Application	Directed and shielded jet below the branches
Rate of Application and Spray Volume	1 L/ha GLYFOS BIO Herbicide + 1 L/ha 2,4-D AMINE, tank mixed in 100 L of water
Number of Applications	Once per year
Interval	N/A

Application Timing (Crop/Pest stage)	In June
Pre-harvest Interval	One year
OTHER	The trees must be 1.2 meters high. The herbicide should not touch the branches.

When using a tank mixture, consult the labels of the tank mix partners and use the largest (most restrictive) buffer zone recommended for any of the products.

TANK MIX: When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

GLYPHOSATE TOLERANT CROPS

WEED CONTROL IN GLYPHOSATE TOLERANT CANOLA (I.E., VARIETIES WITH THE ROUNDUP® READY GENE).

WARNING: APPLY GLYFOS BIO HERBICIDE ON GLYPHOSATE TOLERANT CANOLA VARIETIES ONLY (I.E., VARIETIES WITH THE ROUNDUP READY GENE).

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 the **GENERAL PRODUCT INFORMATION**, **GENERAL APPLICATION NOTES,** and **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** sections.
- Apply GLYFOS BIO HERBICIDE in glyphosate tolerant canola only as directed in the following weed control table.
- Some short-term, visible yellowing may occur when GLYFOS BIO HERBICIDE is 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.

DO NOT APPLY BY AIR

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

WEED CONTROL IN CANOLA WITH THE ROUNDUP READY GENE

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED	COMMENTS (Apply in 50-100 L/ha water)
0.825 - 1.875	0 to 6 leaf	<u>Annual Grasses</u> Wild oats, green foxtail, volunteer barley, volunteer wheat, barnyard grass <u>Annual Broadleaves</u>Stinkweed, redrootpigweed, 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	Repeat applications may be required if a second flush of weeds germinates prior tocanopy closure. Ensure the crop has notadvanced beyond therecommended growth stage. * Use the 1.25 L/ha rate forcontrol of these weeds at all crop growth stages. The lower rate can be used for control of shepherd's purse, cow

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED	COMMENTS (Apply in 50-100 L/ha water)
		buckwheat*, shepherd's purse*, cow cockle*, night-flowering catchfly*, smartweed*, storksbill*, flixweed*, narrow-leaf hawk's beard*, roundleaf mallow*** <u>Perennials(suppression)**</u> Canada thistle, perennial sowthistle, dandelion <u>Perennials (season-long control)</u> Quackgrass**, foxtail barley***, Canada thistle****, perennial sowthistle****	cockleand 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 arerequired.** ******Sequential applications at the 1.25 L/ha rate are required or a single application of 1.875 L/ha.** • For sequential applications, ensure the crop has notadvanced beyond therecommended growth stage. • Maximum 2.5 L/ha is allowed for the postemergence use.

TANK MIXTURES

For season long control of top growth of Canada thistle and control of wild buckwheat in glyphosate tolerant canola (i.e., varieties with the Roundup Ready Gene), apply a tank mixture of 0.28 L/ha of Lontrel 360 with 1.25 L/ha of GLYFOS BIO HERBICIDE, in 100 litres of water per hectare. Apply when canola is in the 2-6 leaf stage. Refer to the Lontrel 360 and to the GLYFOS BIO HERBICIDE labels for a list of other weeds controlled, timing of application, water volumes and use precautions.

Lontrel is a registered trademark of Dow AgroScience LLC.

WEED CONTROL IN GLYPHOSATE TOLERANT SOYBEAN (I.E., VARIETIES WITH THE ROUNDUP READY GENE).

WARNING: APPLY GLYFOS BIO HERBICIDE ON GLYPHOSATE TOLERANT SOYBEAN VARIETIES ONLY (I.E., VARIETIES WITH THE ROUNDUP READY GENE).

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

DO NOT APPLY BY AIR.

WEED CONTROL IN SOYBEAN WITH THE ROUNDUP READY GENE

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED	COMMENTS (Use 100-200 L/ha water volumes)
2.5	First trifoliate leaf stage through flowering	Velvetleaf, common ragweed, common lamb's quarters, redroot pigweed, smooth pigweed,cocklebur,	A second 2.5 L/haapplication may be used for late weed flushes emerging after the initial treatment.

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED	COMMENTS (Use 100-200 L/ha water volumes)
		greensmartweed, lady's thumb, Pennsylvania smartweed,eastern black floweringnightshade, wild mustard, wild buckwheat, foxtail (green, yellow, giant), barnyard grass, crabgrass (smooth, large), quackgrass, milkweed*, yellow nutsedge*, fall panicum, wild proso millet	* suppression only This second application must be made no later than theflowering stage of the soybean.
2.5 - 5.0	First trifoliate leaf stage through flowering	Perennial sowthistle, 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 be at least 2 weeks apart for best results onperennial weeds. This second application must be made no later than the flowering stage of the soybean. Perennial sowthistle and Canada thistle should befrom 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.
5.0	First trifoliate leaf stage through flowering	All weeds listed above, plus milkweed**, yellow nutsedge**, field bindweed**	Only one application per season at 5.0 L/ha. ** Will also be controlled by sequential applications of 2.5 L/ha. Applications should be at least 2 weeks apart for optimum control. This second application must be made no later than the flowering stage of the soybean. 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 time of treatment will not be controlled.

- Weeds will be more easily controlled and early crop competition avoided with applications made

when the weeds are small. Control of annual weeds greater than 25 cm in height will be inconsistent, although some weeds may be controlled.

Tank Mixtures for Roundup Ready Soybeans
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 GLYFOS BIO HERBICIDE at a rate of 2.5 litres per hectare. Use 0.16 to 0.21 litres per hectare of Pursuit and apply up to and including the 3rd trifoliate leaf stage of the Roundup Ready 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 centimeters (20 inches) or more where a single application timing is desired.

Mixing: Add and mix Pursuit as per instructions on the Pursuit label and then add GLYFOS BIO HERBICIDE as per instructions on this label.

A PHI of 100 days is required for the tank mix of GLYFOS BIO HERBICIDE and Pursuit herbicide on glyphosate tolerant soybeans.

Only one application per season of GLYFOS BIO 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.

GLYFOS BIO HERBICIDE plus Assure II Herbicide

Rate	Growth Stage of the Crop	Weeds Controlled	Comments
2.5–5.0 L/ha GLYFOS BIO HERBICIDE + 0.38 L/ha Assure II Herbicide	First trifoliate leaf stage through flowering.	Volunteer Roundup Ready Corn Apply at the 2-6 leaf stage of the weed.	See additional information following this table.

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

Assure is a registered trademark of EI Dupont de Nemours and Company.

Volunteer Roundup Ready Corn Control
For control of volunteer Roundup Ready Corn, Assure II Herbicide may be tank mixed with GLYFOS BIO Herbicide. Use 2.5 – 5.0 litres per hectare of GLYFOS BIO Herbicide and 0.38 litre 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 GLYFOS BIO 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 Roundup Ready Corn is at the 2-6 leaf stage.

A PHI (preharvest interval) of 80 days is required for the tank mix of GLYFOS BIO Herbicide and Assure II Herbicide on Roundup Ready (glyphosate tolerant) soybeans.

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

WEED CONTROL IN GLYPHOSATE TOLERANT CORN I.E., VARIETIES WITH THE ROUNDUP READY GENE

WARNING: APPLY GLYFOS BIO HERBICIDE ON GLYPHOSATE TOLERANT CORN VARIETIES ONLY; I.E., VARIETIES WITH THE ROUNDUP READY GENE.

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

DO NOT APPLY BY AIR.

Weed Control In Corn With The Roundup Ready Gene

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED♦	COMMENTS (use 100-200 L/ha water volumes)
2.5	Up to and including 8 leaf stage	Velvetleaf, common ragweed, commonlamb'squarters, redroot pigweed, smoothpigweed, cocklebur, green smartweed, lady's-thumb, 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, non- glyphosate tolerant canola (rapeseed), hempnettle, kochia, chickweed, corn spurry, wild tomato, cleavers, shepherd's purse, cow cockle, nightflowering catchfly, storksbill, 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	Up to and including 8 leaf stage	Common milkweed, yellow nutsedge, roundleaved mallow, field bindweed	• For control of common milkweed, yellownutsedge, roundleaved mallow and fieldbindweed use twoapplications 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	Up to and including 8 leaf stage	Perennial sow thistle, Canada thistle, wirestemmed muhly	• A second (sequential) application of 2.5 L/ha will improve control in heavy weed infestations. • If sequential applications are used

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED♦	COMMENTS (use 100-200 L/ha water volumes)
			they should be at least 2 weeks apart for bestresults on perennialweeds. • This second application must be made no later than the 8 leaf stage of the corn. • Perennial sow thistle and Canada thistleshould be from therosette 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.

♦ 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.

Tank Mixtures

For tank mixtures, add either atrazine or Marksman Herbicide according to instructions on the product label, and then add GLYFOS BIO Herbicide according to instructions on this label. Refer to the atrazine and Marksman Herbicide product labels for further safety precautions and product handling instructions. DO NOT APPLY BY AIR.

GLYFOS BIO Herbicide Tank Mixes

RATE (L/ha)	GROWTH STAGE OF CROP	WEEDS CONTROLLED♦	COMMENTS (use 100-200 L/ha water volumes)
2.5 GLYFOS BIO Herbicide + 0.75–1.0 kg ai/ha atrazine*	Up to and including the 5th leaf stage.	Residual control of lamb's-quarters, redroot pigweed, common ragweed	Tank mix should be used when only a single application timing is desired. Use the higher rate of atrazine for heavier weed infestations.
2.5 GLYFOS BIO Herbicide + 2.5-3.7 kg/ai/ha Marksman Herbicide	Up to and including the 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 the higher rate of Marksman Herbicide for heavier weed infestations.

* 0.75-1.0 kg ai atrazine/ha is equivalent to 1.56-2.08 L/ha Atrazine 480, or 0.83-1.11 kg/ha Aatrex Nine-O.

♦ 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.

Aatrex Nine-O is a registered trademark of Syngenta Crop Protection Canada Inc. Marksman is a registered trademark of BASF Corporation.

NONCROPLAND AND INDUSTRIAL USES
When applied as recommended under the conditions described, GLYFOS BIO HERBICIDE will control weeds in the noncropland and industrial uses as listed in the **WEED CONTROL IN NONCROPLAND, INDUSTRIAL USES** chart.

TURFGRASS
GLYFOS BIO HERBICIDE may be applied to control existing vegetation prior to turfgrass establishment or renovation. DO NOT DISTURB SOIL OR UNDERGROUND PLANT PARTS BEFORE TREATMENT.
Where existing vegetation is growing under field or unmowed conditions, apply GLYFOS BIO HERBICIDE to actively growing weeds at the growth stages given in the charts on **ANNUAL** and **PERENNIAL WEED CONTROL.** Where the vegetation is growing under mowed turfgrass management, apply GLYFOS BIO HERBICIDE after omitting at least one regular mowing to allow sufficient growth for good spray interception and 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 the underground plant parts. Delay establishment of the turfgrass to determine if regrowth from escaped underground plant parts occurs. When repeat treatments are necessary, sufficient weed regrowth must be attained prior to application.
AVOID **ALL** CONTACT WITH DESIRABLE VEGETATION IN THE VICINITY OF THE RENOVATION OR ESTABLISHMENT AREA.

TREE INJECTION APPLICATIONS
See **VEGETATION CONTROLLED** lists for species controlled.
Trees may be controlled if GLYFOS BIO HERBICIDE is injected directly into the trunk using suitable equipment that penetrates into the living tissue.
GLYFOS BIO HERBICIDE is to be used at a rate of 1 mL (undiluted product) per 10 cm of trunk diameter at chest height. The injections should be spaced evenly around the tree and below any major branches. Application may be done during periods of active growth and full leaf expansion.
Control of trees greater than 20 cm may not be acceptable. Total control may not be evident for 1-2 years following treatment. This treatment will only provide suppression of big-leaf maple; late fall application will provide optimum suppression of big-leaf maple.

CUT STUMP APPLICATIONS
See **VEGETATION CONTROLLED** lists for species controlled.
Woody vegetation may be controlled by the application of this product to freshly cut stumps to prevent regrowth. Application must be made using low-pressure equipment (i.e., squirt bottle).
Apply GLYFOS BIO HERBICIDE immediately to the surface of the freshly cut stump (i.e., within 5 minutes) at a rate of 0.5 mL GLYFOS BIO HERBICIDE for every 5 cm of trunk diameter at chest height. Treat only the cambial tissues (outer edge) of the cut surface. Do not treat the central area of the stump, or exposed roots or bark.
This treatment may be made at any time of year, except during heavy sap flow or when freezing temperatures prevent application of GLYFOS BIO HERBICIDE. A water soluble dye added to the solution may be used as a treatment indicator. Total control may not be apparent until 1-2 years after treatment.

WOODY BRUSH AND TREES (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 the 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.
For woody brush and trees, apply 3 to 6 litres of GLYFOS BIO HERBICIDE per hectare. Use ground boom or boomless equipment, or apply as a 1 to 2% solution using hand held high volume equipment. Use the 6 L/ha rate for maple, alder and willow* species, as well as hard to control perennial weed species.
(*suppression only).

INDUSTRIAL SITES, RIGHTS-OF-WAY, RECREATIONAL AND PUBLIC AREAS
GLYFOS BIO HERBICIDE may be applied to control brush, trees, and annual and perennial weeds listed on this label in **industrial** and **rights-of-way areas**, such as:

railways	forest roadsides	pipelines
highways	pumping stations	petroleum tank farms

telephone and power rights-of-way, etc.

and in **recreationa**l and **public areas**, such as:

parks, golf courses, schoolyards, airports and other public areas.

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

EXTREME CARE MUST BE EXERCISED TO AVOID CONTACT OF SPRAY WITH FOLIAGE OF DESIRABLE TURFGRASS, TREES, SHRUBS, OR OTHER DESIRABLE VEGETATION SINCE SEVERE DAMAGE OR DESTRUCTION MAY RESULT.
Ground application for all noncropland uses: For woody brush and trees, apply GLYFOS BIO HERBICIDE at 3 to 6 L/ha using ground boom, or boomless, or mist blower equipment. Or, apply as a 1 to 2% solution using hand-held high volume equipment. Use the higher rate for maple, alder and willow* species, and for hard to control perennial weeds (*suppression only).
Apply as directed to foliage of actively growing vegetation. Spray coverage should be uniform and complete. Do not spray to the point of runoff, or allow spray drift to contact desirable vegetation as severe injury or destruction may occur.
Mowed or tilled weeds should be allowed to reach optimum growth stage at time of application. DO NOT APPLY UNDER WIND OR OTHER CONDITIONS THAT ALLOW DRIFT.

AERIAL APPLICATIONS: For industrial rights-of-way only Directions for Use
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 rate 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. The use of a spotter plane is recommended.

Use PrecautionsDirections for Use:
Apply only when meteorological conditions at the treatment site allow for complete and even target coverage. Apply only under conditions of good practice specific to aerial application as outlined in the *Basic Knowledge Requirements for Pesticide Education in Canada: Applicator Core and Aerial Module,* developed by CAPCO (Canadian Association of Pest Control Officials).
Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.
Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that result

in fine particles (mist). Do not apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. Do not spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

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.

Product-Specific Precautions

Read and understand the entire label before opening this product. If you have questions, call FMC Corporation at 1-800-331-3148, 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 a spray volume of 30-100 L/ha.

Do not angle nozzles forward into the airstream and do not increase spray volume by increasing nozzle pressure.

Thoroughly wash aircraft, especially landing gear, after each day of spraying to remove residues of GLYFOS BIO HERBICIDE 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.

For woody brush and trees, apply 3-6 litres of this product per hectare. Use 6 litres per hectare formaple, alder and willow* species, and for hard to control perennial weed species. Use the recommended rates of this herbicide in 30 to 100 litres of water per hectare. As density of vegetation increases, spray volume should be increased within the allowed range to ensure complete coverage. (*suppression only)

PURPLE LOOSESTRIFE CONTROL

- DO NOT TREAT PLANTS OVER OPEN WATER. GLYFOS BIO 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, spray-to-wet.
- For wiper applications, see the **WIPER, WICK AND ROLLER EQUIPMENT** section.
- 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 tobecome re-established.

WEED CONTROL IN NONCROPLAND, INDUSTRIAL USES

WEEDS	GROUND APPLICATION			COMMENTS
	BOOM APPLICATION		Hand Held High Volume Application % Solution	
	Rate L/ha	Water Vol. L/ha		

WEEDS	GROUND APPLICATION			COMMENTS
	BOOM APPLICATION		Hand Held High Volume Application % Solution	
	Rate L/ha	Water Vol. L/ha		
Annual grasses and broad leaves	2.25 - 3.5	50 - 100	1	Actively growing weeds.
Perennial weeds Quackgrass	2.5 4.75 - 7.0	50 - 300 50 - 300	1 2	Actively growing weeds. Add 0.5% v/v of a recommended surfactant when using more than 150 L of water (see **MINIMUM AND ZERO TILLAGE TANK MIXES**).
Canada thistle (bud stage)	4.75 - 7.0	100 - 300	2	Use higher rate for heavy infestations and for long term control.
Purple loosestrife	6.0	300 - 600	1 - 2 (or 33% for wiper application)	See **PURPLE LOOSESTRIFE CONTROL** section for instructions on application.
Other perennials	7.0 - 12	100 - 300	2	Summer through fall is optimum.
Brush and trees Birch, cherry, poplar, western snowberry, willow	3.0 - 6.0	100 - 300	1 - 2	Summer through early fall.
Maple, raspberry, salmonberry, alder	6.0	100 - 300	2	Late summer through fall. Fall is optimum.
Turfgrass renovation Annual & perennial weeds	2.5 - 12.0	100 - 300	1 - 2	Use higher end of rate range for perennials.
Roadside vegetation (1-2 metres wide along shoulder)	**1)** 0.75 - 1.0 + 1.25 - 2.5 L DyCleer Herbicide **or 2)** 0.75 - 1.0 + 0.30 L DyCleer Herbicide + 1.2 L 2,4-D amine 500	25 - 150	-	Refer to Tank Mix sections on product labels for specific weeds controlled. Refer to chart on **ANNUAL WEED CONTROL** for rates for specific weeds. For different 2,4-D amine formulations, adjust the rate accordingly. Do not apply to standing water.

WEEDS	GROUND APPLICATION			COMMENTS
	BOOM APPLICATION		Hand Held High Volume Application % Solution	
	Rate L/ha	Water Vol. L/ha		
Residual control Annual & perennial weeds	2.5 - 12 + **1)** 2.5 - 5.6 kg Simazine 80W **or** **2)** 4.0 - 9.0 L Simadex Flowable	200 - 400	-	The simazine part of this tank mix will provide season-long control of most germinating broadleaf weeds and grasses, and may also provide post-emergent control of certain annual weeds. Do not apply to coarse, sandy soil or gravelly soil. One application per year. Use the most restrictive label directions for each product in the mix. For other simazine products registered for this use, use rates equivalent to 2.0-4.5 kg active simazine/ha.

WEED CONTROL IN TREE, VINE AND BERRY CROPS

Crop	Rate (L/ha)	Pre-Harvest Interval (days)	Max. App. per year	Weeds Controlled	Comments
Apples Apricot Cherry (sweet/sour) Peaches Pears Plums	2.25 - 12 directed spray)	30	3	Annual and perennial weeds	Apply as directed spray with no more than 275 kPa pressure.
Apples Grapes	Tank Mix 2.25 - 12 + Simazine 2.0 - 4.5 kg ai/ha	-	1	Annual and perennial weeds	Will provide season-long pre-emergent control. Do not apply to coarse, sandy or gravelly soil. Use the more restrictive label direction for each product in the mix. DO NOT apply to orchards established less than 1 year or vineyards established less than 3 years. 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 directed spray)	14	3	Annual and perennial weeds	Remove all sucker growth from the spray zone before spraying, except for the Concord variety of grape. Suckering should be conducted within 2 weeks prior to application. Do not apply to vines that have been established less than 3 years.
Highbush blueberry (cultivated)	2.8 - 5.6 directed spray)	30	1	Quackgrass	Use as a directed spray, with no more than 275 kPa pressure.

Crop	Rate (L/ha)	Pre-Harvest Interval (days)	Max. App. per year	Weeds Controlled	Comments
Lowbush blueberry	1 - 2% solution (spot treatment)	Apply in non-bearing year only	1	Wood brush	Apply as directed spray in mid-summer of the vegetative (non-bearing) year. See **AGRICULTURAL AND CROPLAND USES** section for instructions on spot treatments.
Filberts Hazelnut (established plantations)	2.25 - 3.5 directed spray)	14	-	Annual weeds	Use as directed spray, with no more than 275 kPa pressure.
Walnut Chestnut Japanese chestnut	2.25 - 12 directed spray)	-	2	Annual and perennial weeds	Apply late spring and fall, post-harvest but prior to a killing frost. Apply in 200 - 300 L water as a directed spray, using no more than 275 kPa pressure. Apply alternatively as a 2% wiper solution. See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section for instructions on wiper applications.
Cranberry	20% Solution (1 L GLYFOS BIO HERBICIDE + 4 L water)	30	1	Annual and perennial weeds	Apply using wick or wiper applicators. See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section for instructions on wiper applications.
Strawberry	1 - 2% solution (spot treatment) 33% solution (wiper applicator)	30	1	Emerged perennial weeds	Apply when weeds are at a susceptible growth stage. See **AGRICULTURAL AND CROPLAND USES** section for instructions on spot treatments. See **APPLICATIONEQUIPMENT AND MIXING INSTRUCTIONS** section for instructions on wiper applications.
Sugar beets	1 - 2% solution (spot treatment)	Treated crop MUST NOT be harvested	1	Dodder species	Apply when dodder is vigorously growing but before flowering. See **AGRICULTURAL AND CROPLAND USES** section for instructions on spot treatments.

ANNUAL WEED CONTROL

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Vol. L/ha	Comments
Boom or boomless	Wild oats, green foxtail, volunteer barley, volunteer wheat, volunteer canola, wild mustard, lady's thumb, stinkweed	Weeds up to 8 cm in height	0.75	50 - 100	For wild oats apply at 1-3 leaf stage. Add 350 mL of a surfactant registered for use such as Agral 90, AgSurf, and Companion. For heavy wild oat infestations use 1.0 L/ha rate.
	All annual grasses listed above plus foxtail barley* (suppression only) All annual broadleaf weeds listed above plus flixweed** and kochia**	Weeds 8 cm to 15 cm	1.0	50 - 100	Add 350 mL of surfactant registered for use as listed above *Apply before initiation of seed head or senescence of the lower leaves. ** Suppression only. Refer to higher rates of this table.
	All annual grasses listed above plus downey brome, giant foxtail and Persian darnel. All annual broadleaf weeds listed above plus lamb's quarters, redroot pigweed, hempnettle, flixweed, Russian thistle, volunteer flax, common ragweed*, Canada fleabane*, wild buckwheat**, narrow-leafhawk's beard***	Weeds up to 15 cm in height	1.25 - 1.9	50 - 100	No additional surfactant required. *DO NOT use these rates onplants 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 1.9 L/ha.

Equipment	Weeds Controlled	Growth Stage	Rate L/ha	Water Vol. L/ha	Comments
	All annual grasses listed above plus crab grass and annual blue grass. All annual broadleaf weeds listed above plus kochia, prickly lettuce, shepherd's purse, annual sow thistle, and narrow-leaf vetch	Weeds up to 15 cm in height	2.25	50 - 100	
	All annual grasses and broadleaf weeds listed above.	Weeds over 15 cm in height	3.5	50 - 100	
Wipers and wicks	Annual weeds	Weeds to be at least 15 cm above desirable vegetation	1	2	This mixture is a 33% solution. Contact point for wiper or wick must be at least 5 cm above desirable vegetation. In severe weed infestations, reduce ground speed to ensure adequate control. See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section for instructions on wiper and wick application.
Rollers	Annual weeds	Weeds to be at least 15 cm above desirable vegetation	0.5 - 1.0	10	This mixture is a 5-10% solution. Roller speed 50-150 rpm. See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS** section for instructions on roller application.

PERENNIAL WEED CONTROL

Equipment	Weeds Controlled	GrowthStage	Rate L/ha	Water Vol. L/ha	Comments
Boom or boomless	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 in **SPECIAL NOTES FOR PERENNIAL WEED CONTROL** for more information.

Equipment	Weeds Controlled	GrowthStage	Rate L/ha	Water Vol. L/ha	Comments
					• For higher water volumes (i.e., 150 - 300 L/ha) an approved surfactant must be added at 0.5 L per 100 L of clean water (0.5% v/v). Refer to list of surfactants in **QUACKGRASS** part of **SPECIAL NOTES FOR PERENNIAL WEED CONTROL** section. See also below.
	Quackgrass (long term control, heavy infestations, high water volumes)	3 to 4 green leaves or more	2.5 - 7.0	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 (i.e., 150 - 300 L/ha). • Refer to **QUACKGRASS** notes in **SPECIAL NOTES FOR PERENNIAL WEED CONTROL** for more information
	Canada thistle	Bud stage or beyond	4.75 - 7	100-300	• Allow 5 days after application before tillage. • Heavy frost prior to application may decrease control.
	Canada thistle	Rosette stage (summer fallow)	2.5	50 - 100	• Apply in clean water using flat fan nozzles. • Ensure proper growth stage by performing last summer fallow tillage between July 5 and August 1st. • Allow regrowth for a minimum of 5 weeks to reach rosette stage and a minimum of 15 cm in diameter. • Allow 10 days after application before tillage. • Treatment after a mild frost is possible if leaves are still green and actively growing but not after heavy damaging frost.
	Other perennial weeds	Early heading or early bud stage (See **VEGETATION**	7 - 12	100-300	• Use higher rate for weeds beyond 8 cm in height or in heavy weed infestation.

Equipment	Weeds Controlled	GrowthStage	Rate L/ha	Water Vol. L/ha	Comments
		CONTROLLED section)			• Allow 7 days after application before tillage. • GLYFOS BIO HERBICIDE rate is equivalent to 70 to 120 mL/100 m^2.
	Field bindweed	Full bloom or beyond	7 - 12	100-300	• Allow 7 days or more after application before tillage.
	Common milkweed*	Bud to full bloom (preharvest) Bud to full bloom	2.5 12	50-100 100-300	• **See PREHARVEST CONTROL OF QUACKGRASS, CANADA THISTLE, MILKWEED, TOADFLAX, and DANDELION; SEASON-LONG CONTROL OF PERENNIAL SOW THISTLE; AND HARVEST MANAGEMENT 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 (summerfallow) 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 under TOADFLAX in SPECIAL NOTES FOR PERENNIAL WEED CONTROL** section, or **PREHARVEST CONTROL OF QUACKGRASS, CANADA THISTLE, MILKWEED, TOADFLAX, and DANDELION; SEASON-LONG CONTROL OF PERENNIAL SOW THISTLE; AND HARVEST MANAGEMENT** section.
	Alfalfa	Early bud to full bloom stage Fall applications only	3.7 – 5.0	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

Equipment	Weeds Controlled	GrowthStage	Rate L/ha	Water Vol. L/ha	Comments
					present. • For spring applications and control in minimum tillage systems using a 2,4-D tank mix, see **ALFALFA CONTROL WITH 2,4-DTANK MIX** section under **SPECIAL NOTES FOR PERENNIAL WEEDCONTROL** section**.**
	Dandelion	< 15 cm > 15 cm Rosette to full bloom (preharvest)	2.5 3.7 – 5.0 2.5	50 - 100 50 - 300 50 - 100	• Allow 3 or more days after treatment before tillage for all rates. • Use the higher rate when infestations are heavy. • Refer to **DANDELION** notes in **SPECIAL NOTES FOR PERENNIAL WEED CONTROL** for more information. • Allow 7 or more days after treatment before tillage. For more information, see **PREHARVEST CONTROL OF QUACKGRASS, CANADA THISTLE, MILKWEED, TOADFLAX, and DANDELION; SEASON-LONG CONTROL OF PERENNIAL SOW THISTLE; AND HARVEST MANAGEMENT** section.
	Foxtail barley	Seeding to heading	2.5 – 5.0	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.
	Woody brush and trees	Actively growing from June through August	3 - 6	100-300	• Use higher rate for maple, alder, *Rubus* species and willow*. Spray to wet.
High volume or knapsack	Woody brush and trees	Actively growing from June through August	1 - 2.0	100	• This mixture is a 1 to 2% solution. Use higher rate for maple, alder, *Rubus* species and willow*. Sprayto wet. • See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS**section for instructions on highvolume or knapsack applications.

Equipment	Weeds Controlled	GrowthStage	Rate L/ha	Water Vol. L/ha	Comments
Wipers and wicks	Perennial weeds	Weeds to be at least 15 cm above desirable vegetation	1	2	• See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS**section for instructions on wiper and wick applications.
Rollers	Annual and perennial weeds	Weeds to be at least 15 cm above desirable vegetation	0.5 - 1.0	10	• This mixture is a 5-10% solution. See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS**section for instructions on rollerapplication. This treatment will only **suppress** perennial weeds contacted. Roller
Tree injection	Trees*	During periods of active growth and full leaf expansion except during periods of heavy sap flow.	0.5 mL per 5 cm of trunk diameter at chest height.	None	• Suitable equipment must be used to penetrate to living tissue. Space applications evenly around the circumference of the trunk below major branches. Control of trees with trunk diameters greater than 20 cm may not be acceptable. • See **APPLICATION EQUIPMENT AND MIXING INSTRUCTIONS**section for instructions on **TREE INJECTION**

*Suppression only for willow.

SPECIAL NOTES FOR PERENNIAL WEED CONTROL QUACKGRASS

For **season-long control on fall tilled ground**: Apply 2.5 litres per hectare of this product in spring prior to seeding. Apply in 50 to 100 litres per hectare of clean water as described in the preceding table. Delay application until the majority of quackgass plants have 4 to 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 groundtilled deeper than 15 centimetres.

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.

SURFACTANTS

The following is a list of approved surfactants for use with GLYFOS BIO HERBICIDE for control of quackgrass:

Agral 90 Companion Ag Surf

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 1st.
2. Allow the thistles to regrow for a minimum of 5 weeks until they are a minimum of 15 centimetres 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.

GLYFOS BIO HERBICIDE PLUS BANVEL OR ORACLE TANK MIXTURES
For control of Canada thistle (and perennial sow thistle) in summerfallow or in postharvest stubble, apply 1.7 litres per hectare GLYFOS BIO HERBICIDE plus 1.25 litres per hectare Banvel or Oracle in 100 – 200 litres per hectare of clean water. In addition,add 350 millilitres per hectare 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 centimetres to 25 centimetres tall and before the bud stage. Cultivate 3 weeks after application. In postharvest 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 1st, 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 10th and July 21st.
2. Allow toadflax to regrow for a minimum of 4 to 5 weeks until they are a minimum of 15 centimetres 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 to 5.0 litres per hectare GLYFOS BIO HERBICIDE and 1.2 to 2.4 litres per hectare of any 500 grams per litre 2,4-D amine or low volatile ester formulation in 100 to 200 litres of water per hectare. (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 litres per hectare) and 2.5 to 5.0 litres per hectare GLYFOS BIO HERBICIDE. Only cereal crops not underseeded to legumes may be planted

following spring applications of this tank mix, and a 14 day interval between application and planting is required.
Use the higher GLYFOS BIO HERBICIDE rates when perennial grasses are prevalent.

ALL PERENNIAL WEEDS
Weed Stages: Weeds must be at the proper stage for effective control. Refer to **PERENNIAL WEED CONTROL WITH GLYFOS BIO HERBICIDE** table.

Nozzle Type: For best results with conventional boom equipment apply this product with 50 to 300 litres per hectare 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 to 7 days for best results. See **ANNUAL AND PERENNIAL WEED CONTROL** tables 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 to control weeds regenerating from seeds or other underground parts. 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.