

GROUP	5	14	15	HERBICIDES
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Fierce[®] MTZ Herbicide

SUSPENSION CONCENTRATE
COMMERCIAL

**FOR CONTROL OR SUPPRESSION OF CERTAIN WEEDS IN LABELLED CROPS AND
NON CROP AREAS**

ACTIVE INGREDIENT:

Flumioxazin.....	59.8 g/L
Metribuzin.....	179.2 g/L
Pyroxasulfone.....	76.4 g/L

Contains 1,2-benzisothiazolin-3-one as a preservative at 0.0386%.

Warning: contains the allergen sulfites.

READ THE LABEL AND BOOKLET BEFORE USE

KEEP OUT OF REACH OF CHILDREN

REGISTRATION NO.: 35803 PEST CONTROL PRODUCTS ACT



CAUTION POISON
EYE IRRITANT

Net Contents: 0.05 – 1500 Litres

Valent Canada, Inc.
201-230 Hanlon Creek Blvd.
Guelph, ON N1C 0A1
519-767-9262

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.

FIRST AID

- IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control 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.
- IF INHALED:** Move the person to fresh air. If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
- IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL OR POISONING CALL
1-800-892-0099***

TOXICOLOGICAL INFORMATION

There is no specific antidote for this product. Apply symptomatic therapy.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. May irritate eyes. Avoid contact with eyes. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin or clothing.

Application Equipment	<u>Personal Protective Equipment and Engineering Controls</u>	
	Mixer/Loader/Clean-up and Repair	Applicator
Groundboom		Open cab: Wear chemical-resistant coveralls over a long-sleeved shirt and long pants, socks, chemical-resistant footwear and chemical-resistant gloves.

Application Equipment	<u>Personal Protective Equipment and Engineering Controls</u>	
	Mixer/Loader/Clean-up and Repair	Applicator
	Open mixing/loading: Wear chemical-resistant coveralls over long-sleeved shirt, long pants, socks, chemical-resistant footwear and chemical-resistant gloves.	Closed cab¹: Wear a long-sleeved shirt, long pants, socks and shoes. Gloves are not required within a closed cab.
Right-of-Way Sprayer	Open mixing/loading: Wear chemical-resistant coveralls over long-sleeved shirt, long pants, socks, chemical-resistant footwear and chemical-resistant gloves.	Open cab: Wear chemical-resistant coveralls over long-sleeved shirt, long pants, socks, chemical-resistant footwear and chemical-resistant gloves.
Manually-Pressurized Handheld Equipment.	Open mixing/loading: Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves.	
Backpack Sprayer		
Mechanically-Pressurized Handheld Equipment	Open mixing/loading and applying a maximum of 19.3 L of Fierce MTZ Herbicide per day: Wear chemical-resistant coveralls over long-sleeved shirt, long pants, socks, chemical-resistant footwear, chemical-resistant gloves and a respirator with a NIOSH-approved organic-vapour removing cartridge with a prefilter approved for pesticides OR a NIOSH approved canister approved for pesticides. DO NOT apply more than 19.3 L of Fierce MTZ Herbicide per day.	

¹ A closed cab provides both a physical barrier and respiratory protection (such as dust/mist filtering and/or vapour/gas purification system). The closed cab must have a chemical-resistant barrier that totally surrounds the occupant and prevents contact with pesticides outside the cab.

DO NOT eat, drink or smoke during work. Wash hands and face thoroughly before eating, drinking, smoking, chewing gum, or using the toilet. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes. Remove clothing immediately if pesticide gets inside. Wash thoroughly and put on clean clothing. After work, change clothing and wash entire body thoroughly. Wash contaminated working clothes separately from other laundry before reuse.

Do not apply when weather conditions favour spray drift from treated areas. **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Keep all unprotected persons out of operating areas, or vicinity where there may be drift.

DO NOT apply by air.

Apply only when the potential for drift beyond the area to be treated is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment, and sprayer settings.

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

Do not apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.

Do not apply within 100 metres of non-dormant pears.

Do not apply to powdery soils or soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.

If this pest control product is to be used on a commodity that may be exported to the U.S. and you require information on acceptable residue levels in the U.S., contact Valent Canada, Inc.

Read and understand the entire label before opening this product. If you have any questions, call the manufacturer at 519-767-9262 or obtain technical advice from the distributor or your provincial or territorial agricultural representative. Application of this specific product must meet and/or conform to the following:

ENVIRONMENTAL PRECAUTIONS

This product is toxic to aquatic organisms and non-target terrestrial plants. Observe spray buffer zones specified under DIRECTIONS FOR USE.

Toxic to certain beneficial arthropods (which may include predatory and parasitic insects, spiders, and mites). Minimize spray drift to reduce harmful effects on beneficial arthropods in habitats next to the application site such as hedgerows and woodland.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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

Avoid application when heavy rain is forecast.

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

DISPOSAL/DECONTAMINATION

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 container unsuitable for further use.

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

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

STORAGE:

DO NOT contaminate water, food or feed by storage. Keep pesticide in original container. Store in a cool, dry, secure place. Do not put formulation or dilute spray solution into food or drink containers. Do not store or transport near feed or food. Not for use or storage in or around the home. Store this product away from food or feed.

RESISTANCE MANAGEMENT

For resistance management, please note that Fierce MTZ Herbicide contains a Group 5, Group 14 and a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to Fierce MTZ Herbicide and other Group 5, Group 14 and/or Group 15 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 Fierce MTZ Herbicide or other Group 5, Group 14 and /or Group 15 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 and to report suspected resistance, contact Valent Canada at 519-767-9262.

APPLICATION INFORMATION

Shake well before use.

Spray equipment used to apply Fierce MTZ Herbicide should not be used to apply other materials to any crop foliage, unless the proper cleanout procedure is followed. See “SPRAYER CLEANUP” for more information.

SPRAYER PREPARATION

Before applying Fierce MTZ Herbicide, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms, must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. Some pesticides, including but not limited to, the sulfonylurea and phenoxy herbicides are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply Fierce MTZ Herbicide. If two or more products were tank mixed prior to Fierce MTZ Herbicide application, the most restrictive cleanup procedure should be followed.

MIXING INSTRUCTIONS

1. Fill clean spray tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, slowly add Fierce MTZ Herbicide to the spray tank. Agitation should create a rippling or rolling action on the water surface.
3. If tank mixing Fierce MTZ Herbicide with other labelled herbicides follow the WAMLEGS [Wettable powders/ flowable, Agitate Anti-foaming compounds/buffers, Microcapsule suspension, Liquid and soluble, Emulsifiable concentrates, High load Glyphosates, Surfactants] mixing order system:
 - Add water soluble bags first
 - Followed by dry formulations, flowables, emulsifiable concentrates and then solutions.
 - Prepare no more spray mixture than is required for the immediate spray operation.
4. Add any required adjuvants.
5. Fill spray tank to desired level with water. **Agitation should continue until all spray solution has been applied.**
6. Mix only the amount of spray solution that can be applied the day of mixing. Fierce MTZ Herbicide should be applied within 6 hours of mixing.

APPLICATION METHOD

Fierce MTZ Herbicide is applied by ground. Application equipment should be clean and in good repair. Nozzles should be uniformly spaced on boom and frequently checked for accuracy. Apply

Fierce MTZ Herbicide, and Fierce MTZ Herbicide tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan (preplant or preemergence applications only) designed to deliver the desired spray pressure and spray volume.

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

CARRIER VOLUME AND SPRAY PRESSURE

Preemergence Application: To ensure uniform coverage, use 100 to 300 L of spray solution per hectare. Nozzle selection should meet manufacturer's volume and pressure recommendations for preemergence herbicide application.

Burndown Application (Prior to Crop Emergence): To ensure thorough coverage in burndown applications, use 150 to 600 L spray solution per hectare. Use 200 to 600 L per hectare if dense vegetation or heavy crop residue is present. Nozzle selection should meet manufacturer's volume and pressure recommendations for postemergence herbicide application. Do not use flood jet nozzles.

SPRAYER CLEANUP

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following Fierce MTZ Herbicide application. After Fierce MTZ Herbicide is applied, the following steps must be used to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank, add 3.8 litres of 3% household ammonia (or equivalent) for every 378.5 L of water, circulate through sprayer for 5 minutes, and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray through the loosened caps. To enhance removal of Fierce MTZ Herbicide from the spray system, add a tank cleaner in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) for 8 hours before flushing the system for a minimum of 15 minutes.
4. Drain tank completely.
5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
6. Remove all nozzles and screens and rinse them in clean water.

Spray equipment, including all tanks, hoses, booms, screens and nozzles, should be thoroughly cleaned before it is used to apply postemergence pesticides. Equipment with Fierce MTZ Herbicide residue remaining in the system may result in crop injury to the subsequently treated crop.

SPRAY BUFFER ZONES

A spray buffer zone is NOT required for uses with hand-held application equipment permitted on this label.

The spray buffer zones specified in the table below are required between the point of direct

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

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitat of Depths:		Terrestrial Habitat:
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Chickpea, field pea, lentils, bare ground on non-crop areas, fall burndown and fallow land	4	2	1	1	10
	Field corn, spring wheat	3	1	1	1	10

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

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

ROTATIONAL RESTRICTIONS

The following rotational crops may be planted after applying Fierce MTZ Herbicide at the listed rate range. Planting earlier than the recommended rotational interval may result in crop injury.

Fierce MTZ Herbicide rate	Crops	Rotational Intervals
1.17-1.75 L/ha	Soybean, chickpea, field pea	Immediately
	Field corn, spring wheat	7 days
	Winter wheat	4 months
	Lentil	6 months
	Other small grains* (including barley, durum wheat, and oats), alfalfa	11 months
	Successful soil bio-assay must be performed prior to planting crops not listed above.	

*At rates higher than 1.17 L/ha, follow a 12 month rotational interval.

GENERAL DIRECTIONS FOR USE

When used in accordance with this label, Fierce MTZ Herbicide:

- Provides residual control of susceptible weeds in labeled crops and in fallow land.
- Provides additional burndown activity when used as part of a burndown program in labeled

- crops and in fallow land.
- Can be used on farms for non-selective vegetation control to maintain bare ground non-crop areas that must be kept weed free.
- Can be used to maintain bare ground in non-crop areas.

Fall Application

Apply Fierce MTZ Herbicide as part of a burndown program to actively growing weeds. Applying Fierce MTZ Herbicide under conditions that do not promote active weed growth will reduce herbicide effectiveness. DO NOT apply Fierce MTZ Herbicide when weeds are under stress due to drought, excessive water, temperature extremes, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. Fierce MTZ Herbicide is most effective when applied under warm sunny conditions.

Burndown applications should be made in combination with other foliar herbicides such as glyphosate or other tank mix partners.

Reduced residual weed control may occur when burndown applications are made to fields where heavy green crop and/or weed material exist.

Rainfastness

Fierce MTZ Herbicide is rainfast one hour after application. DO NOT apply Fierce MTZ Herbicide if rain is expected within one hour of application or postemergence efficacy may be reduced. Rainfall after application will not reduce the efficacy of soil residual control and is required for product activation.

Soil Characteristics

Application of Fierce MTZ Herbicide to soils with high organic matter and/or high clay content may require higher dosages than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

CROP FAILURE

If the crop treated with Fierce MTZ Herbicide is lost due to a catastrophe, such as hail or other forms of inclement weather, soybeans, wheat, chickpeas, field peas and lentils can be replanted immediately, provided a fall application of no more than 1.75 L/ha of Fierce MTZ Herbicide was used on the lost crop. Crop injury may occur if these restrictions are not followed.

GENERAL USE PRECAUTIONS

- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not apply during low-level inversion conditions, including fog.
- Do not apply to frozen or snow-covered soil.
- Do not use prior to seeding durum wheat.
- Mechanical incorporation into the soil will reduce residual weed control. Do not perform any tillage operations after application or weed control will be reduced.
- 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.

- Do not apply more than 1.75L of Fierce MTZ Herbicide per hectare during a single growing season.
- Do not irrigate when crops are newly emerged or cracking the soil surface.
- **DO NOT** apply by air. Use ground application equipment only
- Moisture is necessary to activate Fierce MTZ Herbicide in soil for residual weed control. Dry weather following applications of Fierce MTZ Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, Fierce MTZ Herbicide will control susceptible germinating weeds. Fierce MTZ Herbicide may not control weeds that germinate after application but before an activating rainfall/irrigation or weeds that germinate through cracks resulting from dry soil.
- When adequate moisture is not received after a Fierce MTZ Herbicide application, weed control may be improved by irrigation with at least 1.5-2.5 cm (0.6-1.0") of water.

Pregrazing Intervals:

Following treatment with Fierce MTZ Herbicide, follow these grazing restrictions, **DO NOT** graze treated fields or feed treated forage or hay to livestock, unless otherwise noted below:

For field corn (minimum and no-till **ONLY**):

- Do not harvest as green feed or silage, or permit livestock to graze fields, within 93 days after application.

For spring wheat (minimum and no-till **ONLY**):

- Do not harvest as green feed or permit livestock to graze field within 42 days after application.
- Do not cut hay/fodder within 52 days after application.

Important: Crop injury may occur from applications made to poorly drained soils and/or applications made under cool, wet conditions. Severe crop injury can result when soils are flooded or saturated following application of Fierce MTZ Herbicide. Risk of crop injury can be minimized by using on well drained soils, planting crops at least 4 cm deep, using high quality seed and completely covering seeds with soil prior to preemergence applications. Treated soil that is splashed onto newly emerged crops may result in temporary crop injury. Long periods of drought followed by rainfall may result in temporary crop injury due to excess product absorption. Sandy, low organic matter areas of a field, such as hilltops may be subject to reduced crop tolerance to Fierce MTZ Herbicide.

TANK MIXING

This product may be tank mixed with a fertilizer, a supplement or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact Valent Canada Inc. at www.valent.ca (519-767-9262) for information before applying any tank mix that is not specifically recommended on this label.

Table 1. Weeds Controlled by Fierce MTZ Herbicide

WEEDS CONTROLLED	APPLICATION RATE (L/ha)
Annual sowthistle (<i>Sonchus oleraceus</i>) Ball mustard (<i>Neslia paniculata</i>) Canada fleabane (<i>Conyza canadensis</i>) Cleavers (<i>Galium aparine</i>) Common Barnyard grass (<i>Echinochloa crusgalli</i>) Common chickweed (<i>Stellaria media</i>) Common groundsel (<i>Senecio vulgaris</i>) Common lamb's-quarters (<i>Chenopodium album</i>) Common ragweed (<i>Ambrosia artemisiifolia</i>) Common waterhemp (<i>Amaranthus tamariscinus</i>) Corn spurry (<i>Spergula arvensis</i>) Dandelion (<i>Taraxacum officinale</i>) Downy brome (<i>Bromus tectorum</i>) Eastern black nightshade (<i>Solanum ptycanthum</i>) Foxtail barley (<i>Hordeum jubatum</i>) (suppression) Green foxtail including Group 1 and 2 resistant (<i>Setaria viridis</i>) Green pigweed (<i>Amaranthus powellii</i>) Green smartweed (<i>Polygonum scabrum</i>) Hairy nightshade (<i>Solanum sarachoides</i>) Hempnettle (<i>Galeopsis tetrahit</i>) Henbit (<i>Lamium amplexicaule</i>) ** Japanese brome (<i>Bromus japonicas</i>) Kochia (<i>Kochia scoparia</i>) including Group 2, 4, and 9 resistant kochia Lady's-thumb (<i>Polygonum persicaria</i>) Large crabgrass (<i>Digitaria sanguinalis</i>) Night flowering catchfly (<i>Silene noctiflora</i>) Palmer amaranth (<i>Amaranthus palmeri</i>) Pennsylvania smartweed (<i>Polygonum pennsylvanicum</i>) Redroot pigweed (<i>Amaranthus retroflexus</i>) Russian thistle (<i>Salsola spp.</i>) ** Stinkweed (<i>Thlaspi arvense</i>) Tartary buckwheat (<i>Fagopyrum tataricum</i>) Velvetleaf (<i>Abutilon theophrasti</i>) Volunteer canola (<i>Brassica napus</i>) including glyphosate, glufosinate ammonium and Imidazolinone tolerant varieties Wild buckwheat (<i>Polygonum convolvulus</i>) Wild mustard, including Group 2 resistant (<i>Sinapis arvensis</i>) Wild oats (<i>Avena fatua</i>) Wormseed mustard (<i>Erysimum cheiranthoides</i>) Yellow foxtail (<i>Setaria glauca</i>) (suppression)	1.17-1.75*

*: Use the 1.75 L/ha rate on fine-medium texture soils for season-long residual control

** : Use 1.75 L/ha rate for control.

DIRECTIONS FOR USE IN CHICKPEA and FIELD PEA

APPLICATION TIMING

USE PRECAUTIONS

- Do not irrigate when crop is cracking the soil surface.
- For chickpeas, use on Desi and Kabuli types only.
- Injury may occur when:
 - applied in conjunction with soil-applied organic phosphate pesticides.
 - applied to any soil with less than 2% organic matter.
 - crop is planted less than 4 cm deep.
 - heavy rains occur soon after application, especially in poorly drained areas where water may stand for several days.

Fall Burndown Applications

Fierce MTZ Herbicide, applied as part of a burndown program, may be used for residual weed control where chickpea and field pea will be planted directly into previous crop residues. For control of emerged weeds, tank mix with glyphosate or other non-residual burndown partners. Reduced weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

Application should be made in the fall, just before freeze-up and when winter annuals and perennial weeds are still growing to allow for optimum herbicide absorption and activity. Applications made after a killing frost will result in reduced perennial and winter annual weed control. DO NOT apply to snow covered or frozen soil. Abnormally warm winters may reduce the length of weed control observed in the spring.

CHICKPEA and FIELD PEA – Fall Application Rates	
APPLICATION RATE (L/ha)¹	COMMENTS
1.17	When weeds are already emerged, apply Fierce MTZ Herbicide as a tank mix with a glyphosate product, present as isopropyl amine or potassium salt. Applications should be made prior to ground freeze and must not be made on top of snow cover.
1.75	Use this rate on fine-medium texture soils Applications should be made prior to ground freeze and must not be made on top of snow cover.

¹ Refer to Table 1 for list of controlled weeds.

DIRECTIONS FOR USE IN LENTIL [Small Red and Large Green Varieties]

APPLICATION TIMING

Fall Burndown Applications

Fierce MTZ Herbicide, applied as part of a burndown program, may be used for residual weed control where lentils will be planted directly into previous crop residues. For control of emerged weeds, tank mix with glyphosate or non-residual other burndown partners. Reduced weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

Application should be made in the fall, just before freeze-up and when winter annuals and perennial weeds are still growing to allow for optimum herbicide absorption and activity. Applications made after a killing frost will result in reduced perennial and winter annual weed control. **DO NOT** apply to snow covered or frozen soil. Abnormally warm winters may reduce the length of weed control observed in the spring.

CROP TOLERANCE

Lentil varieties vary in their tolerance to Fierce MTZ Herbicide. Testing has shown that small-seeded red and large-seeded green varieties are most tolerant to applications of Fierce MTZ Herbicide. Other seed classes of lentils should not be planted into areas treated with Fierce MTZ Herbicide.

Environmental conditions, such as saturated soils, and abnormally cool, wet weather after seeding may also increase the risk of lentil injury following a fall application of Fierce MTZ Herbicide. Fierce MTZ Herbicide is a very active herbicide and the user should exercise caution until gaining familiarity with this product.

- **DO NOT** use on soils with less than 2% organic matter

LENTILS [Small Red and Large Green Varieties] – Fall Application Rates	
APPLICATION RATE (L/ha)¹	COMMENTS
1.17	When weeds are already emerged, apply Fierce MTZ Herbicide as a tank mix with a glyphosate product, present as isopropyl amine or potassium salt. Applications should be made prior to ground freeze and must not be made on top of snow cover.
1.75	Use this rate on fine-medium texture soils for season-long residual control. Applications should be made prior to ground freeze and must not be made on top of snow cover.

¹ Refer to Table 1 for list of controlled weeds.

DIRECTIONS FOR USE IN FIELD CORN (Minimum and No-till ONLY)

APPLICATION TIMING

Fall Burndown Applications

Fierce MTZ Herbicide, applied as part of a burndown program, may be used for residual weed control where field corn will be planted directly into previous crop residues. For control of emerged weeds, tank mix with glyphosate, present as isopropyl amine or potassium salt. Reduced weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist. DO NOT apply to frozen or snow covered soil.

USE PRECAUTIONS

- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil. Crop injury may occur from applications made to poorly drained soil and/or applications made under cool, wet conditions. Severe crop injury will result when soils are flooded following applications of Fierce MTZ Herbicide.
- Do not irrigate when corn is emerging to 2-leaf.
- Weed control will be reduced if there is mechanical incorporation into the soil or if emerged weeds are controlled by cultivation. Do not perform any tillage operations after application or weed control will be reduced. No-till planters that incorporate the soil during planting may result in decreased weed control in the row.
- Do not use on soils with less than 1% organic matter unless activation rainfall has occurred between application and planting.
- Do not use on popcorn, sweet corn, or corn grown for seed.
- Apply only once during a single growing season.
- Do not apply to fine-textured soils, peat or muck soil.
- Do not apply on coarse textured soils with less than 1.5% organic matter.

Important: Crop injury may occur from applications made to poorly drained soils and/or applications made under cool, wet conditions. Severe crop injury will result when soils are flooded following application of Fierce MTZ Herbicide.

Field Corn (Minimum and No-till) – FALL APPLICATION RATES	
APPLICATION RATE (L/ha)¹	COMMENTS
1.17	Preemergence: Apply prior to weed emergence into no-till or minimum tillage fields. Apply in the fall, prior to planting. Postemergence: When weeds are already emerged, apply Fierce MTZ Herbicide as a tank mix with a glyphosate product, present as isopropyl amine or potassium salt.

¹ Refer to Table 1 for list of controlled weeds.

TANK MIX PARTNERS

Burndown Activity

Fierce MTZ Herbicide may be tank mixed with other herbicides for increased burndown activity, additional residual broadleaf and/or additional grass control. Recommended tank mix partners include glyphosate, 2,4-D or dicamba.

DIRECTIONS FOR USE IN SPRING WHEAT (Minimum and No-till ONLY)

APPLICATION TIMING

Fall Burndown Applications

Fierce MTZ Herbicide, applied as part of a burndown program, may be used for residual weed control where spring wheat will be planted directly into previous crop residues. For control of emerged weeds, tank mix with glyphosate, present as isopropyl amine or potassium salt. Reduced weed control may occur when burndown applications are made to fields where heavy crop and/or weed residue exist.

USE PRECAUTIONS

- Use only on no-till or minimum tillage fields where last year's crop residue has not been incorporated into the soil. Crop injury may occur from applications made to poorly drained soil and/or applications made under cool, wet conditions. Severe crop injury will result when soils are flooded following applications of Fierce MTZ Herbicide.
- Wheat must be planted a minimum of 2.5 cm (1 inch) deep to ensure crop safety.
- Do not irrigate spring wheat between emergence and spike.
- Weed control will be reduced if there is mechanical incorporation into the soil or if emerged weeds are controlled by cultivation. Do not perform any tillage operations after application or weed control will be reduced. No-till planters that incorporate the soil during planting may result in decreased weed control in the row.
- Do not apply to fine-textured soils, peat or muck soil.
- DO NOT use prior to seeding durum wheat.
- DO NOT use on soils containing less than 2% organic matter. Application made before heavy rainfall or irrigation (3 cm or more) on these low organic matter soils may cause crop injury ranging from leaf burn to stand reduction.

Spring Wheat (Minimum and No-till) – FALL APPLICATION RATE	
APPLICATION RATE (L/ha) ¹	COMMENTS
1.17	Preemergence: Apply prior to weed emergence, prior to planting spring wheat into no-till or minimum tillage fields. Apply in the fall, prior to planting. Postemergence: When weeds are already emerged, apply Fierce MTZ Herbicide as a tank mix with a glyphosate product, present as isopropyl amine or potassium salt.

¹ Refer to Table 1 for list of controlled weeds.

DIRECTIONS FOR USE IN FALL BURNDOWN AND FALLOW LAND

Apply 1.17 to 1.75 L/ha of Fierce MTZ Herbicide in the fall to provide residual weed control in fields that will be planted the following spring as identified in the crop rotational interval table. Weeds controlled by residual activity are listed in Table 1 (see above). If weeds have emerged at the time of application, use Fierce MTZ Herbicide in combination with a labeled burndown herbicide. Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

DIRECTIONS FOR USE TO MAINTAIN BARE GROUND ON NON-CROP

Use Fierce MTZ Herbicide for non-selective vegetation control to maintain bare ground on non-crop areas of farms that must be kept weed free.

Fierce MTZ Herbicide offers residual and postemergence control of susceptible broadleaf and grass weeds as well as an additional mode of action to assist in the control of ALS (acetolactate synthase) resistant weeds. Fierce MTZ Herbicide can be tank mixed with the other herbicides for increased residual or postemergence control. The length of residual control is dependent on the rate applied as well as on rainfall and temperature conditions. Length of residual control will decrease as temperature and precipitation increase. Fierce MTZ Herbicide rates of 1.17 to 1.75 L/ha are required to provide residual control of the weeds listed in Table 1 above.

USE PRECAUTIONS

- Do not apply to farm alleys or roads where traffic may result in treated dust settling onto crops or other desirable vegetation.
- Do not apply to ditch banks.
- Do not apply within 100 metres of non-dormant pears.
- Do not apply to powdery soils or soils that are susceptible to wind displacement unless irrigation can be applied immediately after application.
- Do not make more than one application per season.

PREEMERGENCE APPLICATION

Apply 1.17 to 1.75 L/ha of Fierce MTZ Herbicide as a preemergence application. Preemergence applications of Fierce MTZ Herbicide must be completed prior to weed emergence. Moisture is necessary to activate Fierce MTZ Herbicide on soil for residual weed control. Dry weather following application of Fierce MTZ Herbicide may reduce effectiveness. However, when adequate moisture is received after dry conditions, Fierce MTZ Herbicide will control susceptible germinating weeds.

POSTEMERGENCE APPLICATION

Apply 1.17 to 1.75 L/ha of Fierce MTZ Herbicide plus an adjuvant (0.25% v/v non-ionic surfactant) as a postemergence application. The addition of an adjuvant enhances activity on emerged weeds. Thorough spray coverage is necessary to maximize the postemergence activity of Fierce MTZ Herbicide. Emerged weeds are controlled postemergence with Fierce MTZ Herbicide, however, translocation of within a weed is limited, and control is affected by spray coverage and by the addition of an adjuvant. The most effective postemergence weed control with Fierce MTZ Herbicide occurs when applied in combination with a surfactant to weeds less than 5 cm in height. A tank mix partner should be used in combination with Fierce MTZ Herbicide for the postemergence control of weeds greater than 5 cm.

TANK MIX PARTNERS: Recommended tank mix partners include glyphosate, 2,4-D Ester and glufosinate ammonium.

Fierce is a registered trademark of Valent U.S.A. LLC

All other products mentioned are the trademarks or registered trademarks of their respective companies.

GROUP	5	14	15	HERBICIDES
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Fierce[®] MTZ Herbicide

SUSPENSION CONCENTRATE
COMMERCIAL

**FOR CONTROL OR SUPPRESSION OF CERTAIN WEEDS IN LABELLED CROPS AND
NON CROP AREAS**

ACTIVE INGREDIENT:

Flumioxazin.....	59.8 g/L
Metribuzin.....	179.2 g/L
Pyroxasulfone.....	76.4 g/L

Contains 1,2-benzisothiazolin-3-one as a preservative at 0.0386%.

Warning: contains the allergen sulfites.

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

REGISTRATION NO.: 35803 PEST CONTROL PRODUCTS ACT



CAUTION POISON
EYE IRRITANT

Net Contents: 0.05 – 1500 Litres

Valent Canada, Inc.
201-230 Hanlon Creek Blvd.
Guelph, ON N1C 0A1
519-767-9262

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.

FIRST AID

- IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control 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.
- IF INHALED:** Move the person to fresh air. If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.
- IF SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

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

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL OR POISONING CALL
1-800-892-0099***

TOXICOLOGICAL INFORMATION

There is no specific antidote for this product. Apply symptomatic therapy.

PRECAUTIONS

KEEP OUT OF THE REACH OF CHILDREN. May irritate eyes. Avoid contact with eyes. Harmful if swallowed. Harmful if absorbed through skin. Avoid contact with skin or clothing.

Follow the personal protective equipment, engineering control, and restriction requirements for the appropriate mixer/loader and applicator scenario as described on the booklet label.

ENVIRONMENTAL PRECAUTIONS

See booklet for full user precautions and restrictions.

DISPOSAL/DECONTAMINATION

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 container unsuitable for further use.

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

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

STORAGE:

DO NOT contaminate water, food or feed by storage. Keep pesticide in original container. Store in a cool, dry, secure place. Do not put formulation or dilute spray solution into food or drink containers. Do not store or transport near feed or food. Not for use or storage in or around the home. Store this product away from food or feed.