

PMRA Approved
2019-2709
2020-09-04

Label

GROUP	14	HERBICIDE
-------	----	-----------

SZ-75 HERBICIDE

COMMERCIAL

Water Dispersible Granules

For Use on Chickpeas, Field Pea, Flax, Sunflower and Soybeans

ACTIVE INGREDIENT: Sulfentrazone..... 75%

REGISTRATION NO. 33832 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BOOKLET BEFORE USING



Net Contents: 1 kg - Bulk

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
1-833-362-7722

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

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

<p>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.</p>

<p>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.</p>

<p>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.</p>

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

You may also contact **1-800-331-3148** for emergency medical treatment information.

TOXICOLOGICAL INFORMATION

Treat Symptomatically.

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN Hazards to Humans and Domestic Animals

Harmful if inhaled. Avoid breathing dusts. May irritate eyes. Avoid contact with eyes.

Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Remove clothing immediately if pesticide gets inside. Then bathe thoroughly and put on clean clothing.

ENVIRONMENTAL PRECAUTIONS

Toxic to small wild mammals.

Toxic to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

Sulfentrazone is persistent and may carryover. It is recommended that any products containing sulfentrazone not be used in areas treated with this product during the previous season.

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. **DO NOT** use on coarse soils.

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

Avoid application when heavy rain is forecast.

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

STORAGE

Store in original containers only. Store containers in a dry location. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Store this product away from food or feed.

DISPOSAL

For refillable containers:

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

For returnable containers:

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

For recyclable containers:

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

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

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

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

**IN CASE OF EMERGENCY, CALL TOLL FREE,
DAY OR NIGHT: 1-800-331-3148**

PMRA Approved
2019-2709
2020-09-04

Booklet

GROUP	14	HERBICIDE
-------	-----------	-----------

SZ-75 HERBICIDE

COMMERCIAL

Water Dispersible Granules

For Use on Chickpeas, Field Pea, Flax, Sunflower and Soybeans

ACTIVE INGREDIENT: Sulfentrazone..... 75%

REGISTRATION NO. 33832 PEST CONTROL PRODUCTS ACT

READ THE LABEL AND BOOKLET BEFORE USING



Net Contents: 1 kg - Bulk

FMC of Canada Limited
6755 Mississauga Road, Suite 204
Mississauga, ON L5N 7Y2
1-833-362-7722

TABLE OF CONTENTS

Section Number

GENERAL INFORMATION AND SAFETY HANDLING	Notice to User.....	1
	Product Information.....	2
	Proper Handling Instructions.....	2
	First Aid and Toxicological Information	4
	Precautions, Protective Clothing and Equipment	5
	Environmental <u>Precautions</u>	6
	Storage.....	7
	Disposal.....	8
DIRECTIONS FOR USE	Crops and Weeds	9
	Crops	9.1
	Weeds Controlled	9.2
	Field Crops	9.3
	Tank mixes	9.4
	Application Information	10
	General Application Instructions	10.1
	Buffer Zones	10.2
	Rotation Crop Guidelines	10.3
	Restricted Entry Interval	11
	Mixing and Loading Instructions	12
	Sprayer equipment Cleanup.....	13
	Resistance Management Recommendations.....	14

GENERAL INFORMATION

SECTION 1: NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

SECTION 2: PRODUCT INFORMATION

SZ-75 Herbicide is a selective soil applied herbicide for the control kochia in chickpeas, field peas, flax, sunflower and soybeans.

SZ-75 Herbicide is a water dispersible formulation containing 75% of the active ingredient, sulfentrazone intended for dilution with water for application.

SZ-75 Herbicide is taken up by the plant roots and shoots.

Observe all instructions, mixing directions, application precautions and other label information of SZ-75 Herbicide.

For information regarding the use of this product, visit www.fmccrop.ca

SAFETY AND HANDLING

SECTION 3: PROPER HANDLING INSTRUCTIONS

SZ-75 Herbicide may not be mixed or loaded within 15 metres of any wells (including abandoned wells and drainage wells), sink holes, perennial or intermittent streams or rivers, and natural or impounded lakes and reservoirs. This setback does not apply to properly capped or plugged abandoned wells and does not apply to impervious pads or properly diked mixing/loading areas.

Operations that involve mixing, loading, rinsing or washing of this product into or from pesticide handling or application equipment or containers within 15 metres of any well, are prohibited unless conducted on an impervious pad constructed to withstand the weight of the heaviest load that may be positioned on or moved across the pad. Such a pad shall be designed and maintained to contain any product spills or equipment leaks, container or equipment rinse or wash water, and rainwater that may fall on the pad. Surface water shall not be allowed to either flow over or from the pad, which means the pad must be self-contained. The pad shall be sloped to facilitate material removal. An unroofed pad shall be of sufficient capacity to contain at a minimum 110% of the capacity of the largest pesticide container or application equipment on the pad. A pad that is covered by a roof of sufficient size to completely exclude precipitation from contact with the pad shall have a minimum containment capacity of 100% of the capacity of the largest pesticide container or application equipment on the pad. Containment capacities as described above shall be maintained at all times. The above specific minimum containment capacities do not apply to vehicles when delivering pesticide shipments to the mixing/loading

site. Provinces may have in effect additional requirements regarding wellhead setbacks and operational containment.

SZ-75 Herbicide must be used in a manner which will prevent back siphoning in wells, spills or improper disposal of excess pesticide, spray mixtures or rinsates.

SECTION 4: FIRST AID AND TOXICOLOGICAL INFORMATION

FIRST AID

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

<p>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.</p>

<p>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.</p>

<p>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.</p>

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

You may also contact **1-800-331-3148** for emergency medical treatment information.

TOXICOLOGICAL INFORMATION

Treat Symptomatically.

SECTION 5: PRECAUTIONS, PROTECTIVE CLOTHING AND EQUIPMENT

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN

Hazards to Humans and Domestic Animals

Harmful if inhaled. Avoid breathing dusts. May irritate eyes. Avoid contact with eyes.

Apply only to agricultural crops when the potential for drift to areas of human habitation and 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.

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., please contact FMC Corporation at 1-833-362-7722 or at <https://ag.fmc.com/ca/en>.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear a long-sleeved shirt, long pants, chemical-resistant gloves, socks and shoes during mixing, loading, application, clean-up and repair. Gloves are not required during application within a closed cab.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Remove clothing immediately if pesticide gets inside. Then bathe thoroughly and put on clean clothing.

SECTION 6: ENVIRONMENTAL PRECAUTIONS

Toxic to small wild mammals.

Toxic to non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

Sulfentrazone is persistent and may carryover. It is recommended that any products containing sulfentrazone not be used in areas treated with this product during the previous season.

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. **DO NOT** use on coarse soils.

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.

SECTION 7: STORAGE

Store in original containers only. Store containers in a dry location. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

Store this product away from food or feed.

SECTION 8: DISPOSAL

For refillable containers:

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

For returnable containers:

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

For recyclable containers:

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

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

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

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

<p style="text-align: center;">IN CASE OF EMERGENCY, CALL TOLL FREE, DAY OR NIGHT: 1-800-331-3148</p>
--

DIRECTIONS FOR USE

SECTION 9: CROPS AND WEEDS

SECTION 9.1: CROPS

SZ-75 Herbicide may be applied to pre-plant or pre-emergent to chickpeas, field peas, flax, sunflower and soybeans.

SZ-75 Herbicide does not control emerged weeds.

SECTION 9.2: WEEDS CONTROLLED

When used as directed, SZ-75 Herbicide alone and tank mixed with glyphosate will provide control of kochia (including Group 2 and Group 9 resistant biotypes).

Use rate of SZ-75 Herbicide	Weeds controlled
140 g/ha	Kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant or pre-emergence application per season. Apply in 100 L of water per ha. Do not apply to soils classified as coarse-textured soils. Do not apply in fine textured soils with less than 1.5% organic matter. Do not use on any type of soils with an organic matter content greater than 6%. Do not use on soils with a pH of 7.8 or greater.</p>	

SZ-75 Herbicide + Glyphosate

Use rate of SZ-75 Herbicide	Use rate of glyphosate	Weeds controlled
140 g/ha	450 g ae/ha	All the weeds controlled by glyphosate, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant or pre-emergence application per season. Apply in 100 L of water per ha. Follow all directions on the glyphosate product label. Do not apply to soils classified as coarse-textured soils. Do not apply in fine textured soils with less than 1.5% organic matter. Do not use on any type of soils with an organic matter content greater than 6%. Do not use on soils with a pH of 7.8 or greater.</p>		

SECTION 9.3 FIELD CROPS

CHICKPEAS, FIELD PEAS, FLAX, SUNFLOWER and SOYBEANS

Make one pre plant or pre emergence application per season. Apply in 100 L of water per ha.

APPLICATION INFORMATION

SZ-75 Herbicide should be applied as a uniform broadcast soil application.

For best control, SZ-75 Herbicide should be applied when there are no weeds present or a postemergence herbicide is tank mixed to eliminate emerged weeds.

For improved weed management, SZ-75 Herbicide can be applied in a tank mixture with other preemergence and postemergence burndown herbicides. When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, restrictions and precautions for each product used in the tank-mix. Always use in accordance with the most restrictive label restrictions and precautions. Do not tank mix with Chateau® herbicides (flumioxazin) or with other products containing sulfentrazone.

A minimum of 100 L of spray solution per ha should be used to ensure uniform spray coverage. Nozzle selection should meet manufacturer's spray volume and pressure recommendations for

preemergence and postemergence herbicide applications. The spray solution should have a pH between 5.0 and 9.0.

Best results are obtained when the soil is moist at the time of application and the application will be followed by at least 18 mm of rainfall or sprinkler irrigation within two weeks after application. Applications should be timed to take advantage of normal rainfall patterns and cool temperatures, especially where drip or micro sprinkler irrigation is used which may not uniformly incorporate the herbicide.

Restrictions

- Use ground equipment only. Do not apply SZ-75 Herbicide by air. Do not apply using a mechanically pressurized handgun.
- Do not apply to powdery soils or soils where wind may displace the soil, unless irrigation can be applied immediately after application.
- Follow the most restrictive label of tank mix partners including all references to potential carryover and crop injury warnings and restrictions.

WEED CONTROL INFORMATION

SZ-75 Herbicide is a selective soil-applied herbicide for the control of kochia. Adequate moisture of at least 18 mm is required within 14 days after application for optimal control. If adequate rainfall is not received in a timely fashion, irrigate with a minimum of 18 mm of water. When activating moisture is delayed, a reduced level of weed control may occur. These escaped weeds can be removed using a burndown herbicide.

Tank mix SZ-75 Herbicide with a burndown herbicide and use an appropriate adjuvant when weeds are present at the time of application. Refer to the tank mix partner's product label for the proper use rates by weed sizes. Use the most restrictive label limitations and precautions of the tank mix product(s).

Residual weed control may be reduced when SZ-75 Herbicide is applied where heavy crop trash such as leaves and branches and /or weed residues exists. It is best to rake or blow off the leaves and trash when they fall and prior to the SZ-75 Herbicide application.

SECTION 9.4: TANK MIXES

CHICKPEA, FIELD PEA AND SOYBEAN

Apply SZ-75 Herbicide at 140 g/ha plus EXPRESS® SG Herbicide at 15 g/ha, tank mixed with glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) at 270-450 g ae/ha and adjuvant (where required) in a total spray volume of 100 L/ha.

Fields treated with this tank mix can be seeded to chickpea, field pea or soybean a minimum of 24 hours after application.

Tank Mix Partner	Application Rate	Weeds Controlled
Express® SG + Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt)	15 g/ha + 450 g ae/ha	All the weeds controlled by EXPRESS® SG Herbicide + glyphosate, plus pre-emergent control of kochia (including Group 2 and Group 9 resistant biotypes)
Express® SG + Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt) + Agral® 90	15 g/ha + 270 g ae/ha + 0.35% v/v	All the weeds controlled by EXPRESS® SG Herbicide + glyphosate, plus pre-emergent control of kochia (including Group 2 and Group 9 resistant biotypes)
<p>Injury to pulse crops may occur on coarse-textured soils, low in organic matter (less than 3%), or in fields with variable soils, gravelly areas, sandy areas or eroded knolls. Avoid planting pulse crops in soils containing more than 50% sand.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the EXPRESS® SG Herbicide and glyphosate product labels.</p>		

FOR USE ON SOYBEANS IN EASTERN CANADA ONLY

Apply SZ-75 Herbicide at 140 g/ha with the following tank mix partner options in a total spray volume of 100 L/ha. Make one pre-plant or pre-emergence application per season.

Follow the most restrictive label of tank mix partners including all references to potential carryover and crop injury warnings and restrictions.

Tank Mix Partner	Application Rate	Weeds Controlled
Classic™ Herbicide (chlorimuron-ethyl) + Glyphosate (present as potassium salt, isopropylamine salt, ammonium salt)	36 g/ha + 450 g ae/ha	All the weeds controlled by chlorimuron-ethyl + glyphosate, plus kochia (including Group 2 and Group 9 resistant biotypes)

Tank Mix Partner	Application Rate	Weeds Controlled
Classic™ Herbicide	36 g/ha	All the weeds controlled by Classic, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the Classic™ Herbicide and glyphosate product labels.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
Boundary™ LQD Herbicide (S-Metolachlor and metribuzin)	1.85-2.5 L/ha	All the weeds controlled by Boundary LQD, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.5 or greater.</p> <p>Follow all directions on the Boundary™ LQD Herbicide product label.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
CONQUEST® Herbicide Tank Mix	567 g/ha of CONQUEST A 107 g/ha of CONQUEST B	All the weeds controlled by metribuzin and imazethapyr, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the CONQUEST® Herbicide Tank Mix product labels.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
Frontier™ Max (Dimethenamid-P)	860-963 ml/ha	All the weeds controlled by Frontier Max, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the Frontier™ Max Herbicide product label.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
Sencor® 480 F Herbicide (Metribuzin)	1.1 to 1.75 L/ha	All the weeds controlled by metribuzin, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the Sencor® 480 F Herbicide product label.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
Pursuit™ (Imazethapyr)	420 ml/ha	All the weeds controlled by imazethapyr, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p> <p>Follow all directions on the Pursuit™ Herbicide product label.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
FOCUS® (pyroxasulfone + carfentrazone-ethyl)	224 ml/ha	All the weeds controlled by pyroxysulfone + carfentrazone-ethyl, plus kochia (including Group 2 and Group 9 resistant biotypes)
<p>Make one pre-plant application per season.</p> <p>Do not apply in fine textured soils with less than 1.5% organic matter.</p> <p>Do not use on any type of soil with an organic matter content greater than 6%.</p> <p>Do not apply to soils classified as coarse-textured soils.</p> <p>Do not use on soils with a pH of 7.8 or greater.</p>		

Tank Mix Partner	Application Rate	Weeds Controlled
Follow all directions on the Pursuit Herbicide product label.		

Consult the labels of tank mix partners for specific instructions of “Directions for Use” and restrictions.

In some cases, tank mixing a pest control product with another pest control product or a fertilizer can result in biological effects that could include, but are not limited to: reduced pest efficacy or increased host crop injury. The user should contact FMC at 1-833-362-7722 for information before mixing any pesticide or fertilizer that is not specifically recommended on this label.

APPLICATION INFORMATION

PREEMERGENCE APPLICATION:

- SZ-75 Herbicide alone, or in the recommended tank-mixes, may be applied to the soil surface as a broadcast spray after planting of the crop, but prior to weed or crop emergence.
- Preemergence application may be made in all tillage systems (conventional, conservation, minimum, ridge, etc.).
- Rainfall and/or overhead sprinkler irrigation is necessary to move SZ-75 Herbicide into the upper soil surface where weed seeds germinate.
- If adequate moisture is not received within 7 to 10 days after application and weeds begin to emerge from the soil, a light rotary hoeing or shallow incorporation (no deeper than 1.25 cm deep) will improve performance, minimize crop damage, activate chemical and prevent soil crusting.
- Dry weather conditions as well as excessive rainfall or irrigation following application may reduce weed control.
- Do not apply heavy irrigation immediately after application.

These Crop Specific Use directions are based upon the interactive effects of SZ-75 Herbicide (sulfentrazone) and the primary soil and environmental factors, which affect its activity on various weed species and tolerance among crops. The user is required to observe the instructions and guidance presented under General Application Instructions, General SZ-75 Herbicide Product Use Rates, Rotational Crop Guidelines, Replanting Instructions, Weeds Controlled and any other section of this label pertinent to the anticipated crop use. It is important to note that not all varieties or cultivars of a given crop species have been evaluated under treatment with SZ-75 Herbicide. Consult university or extension weed management specialists for additional information on specific local varieties or cultivars and any other pertinent information on SZ-75 Herbicide under specific local conditions.

SECTION 10: APPLICATION INFORMATION

SECTION 10.1: GENERAL APPLICATION INSTRUCTIONS

DO NOT apply using aerial application equipment.

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

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

SZ-75 Herbicide can be applied with conventional ground spraying equipment.

SZ-75 Herbicide may be applied pre-plant or pre-emergence **AS A SINGLE GROUND APPLICATION**. SZ-75 Herbicide can be applied prior to planting or up to 3 days after planting, but before seed germination. When applications after planting are delayed greater than 3 days, injury may occur if seeds are germinating. SZ-75 Herbicide applied near or after crop emergence may cause severe injury to the crop. Do not make fall applications to a crop unless it is specifically recommended on this label.

Water must be used as the carrier for SZ-75 Herbicide. Do not allow spray mixtures to sit overnight due to potential settling of product and difficulty in resuspending may occur. Avoid spray drift to adjacent plants as injury to other plants may occur.

Ground Application

Utilize a boom and nozzle sprayer or boomless ground sprayer equipped with the appropriate nozzles, spray tips and screens and adjusted to provide optimum spray distribution and coverage at the appropriate operating pressures. Utilize nozzles and pressures that produce a medium spray as classified by the American Society of Agricultural Engineers (ASAE) to avoid spray drift or inadequate foliar and soil coverage. Consult with spray nozzle manufacturer's charts to determine the correct nozzle and pressure combination required to achieve a medium spray. Utilize nozzles that produce minimal amounts of fine spray droplets to avoid spray drift or inadequate foliar and soil coverage. Do not exceed 175 kPa spray pressure unless otherwise required by the manufacturer of drift reducing nozzles or boomless application systems. Apply a minimum of 100 litres of finished spray per hectare by ground. Be aware that spray pattern overlaps and slower ground speeds while starting, stopping or turning while spraying may result in excessive application and subsequent crop response.

Spray Drift Management

Minimizing spray drift at the application site is the responsibility of the applicator and the grower. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions.

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.

Controlling Spray Droplet Size

Volume: Use high flow rate nozzles to apply the greatest practical spray volume. Nozzles with higher rated flow generally produce larger droplets.

Pressure: When higher flow rates are needed, use higher flow rate nozzles rather than increasing spray pressure. Do not exceed the nozzle manufacturer's recommended pressures. Lower pressure produces larger droplets in many types of nozzles.

Nozzle Type: Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles for ground applications.

Do not apply with spray droplets smaller than the American Society of Agricultural Engineers (ASAE) medium classification. Consult with spray nozzle manufacturer's charts to determine the correct nozzle and pressure combination required to achieve a medium spray. Boom height must be 60 cm or less above the crop or ground.

Rainfall Requirement

All soil applications of SZ-75 Herbicide require adequate rainfall for herbicidal activation. The ultimate amount of moisture, whether supplied by rainfall or irrigation, is dependent on several factors. These factors include but are not limited to existing soil moisture at application, soil type, organic matter and pH. In crop situations, dependent on rainfall, SZ-75 Herbicide can await activating moisture for extended periods (10 to 14 days or longer) depending on the soil parameters described above. Once activated, SZ-75 Herbicide will provide activity on existing weeds. Where irrigation is not available and rainfall has not provided activation, particularly for surface applications of SZ-75 Herbicide, a shallow incorporation is recommended to initiate the process of activation with existing soil moisture. In circumstances where prolonged periods without rainfall or irrigation are not possible, alternative or additional weed management practices (cultivation or post-applied herbicides) may be required.

When activating moisture is received after dry conditions, SZ-75 Herbicide may provide a reduced level of control of susceptible germinating weeds. Soil applications of SZ-75 Herbicide must be made before crop seed germination to prevent injury to the emerging crop seedlings. When applications after planting are delayed, injury may occur if seeds are germinating or if they are located near the soil surface.

Mode of Action

Sulfentrazone, the active ingredient in SZ-75 Herbicide, is a potent inhibitor of the enzyme Protoporphyrinogen Oxidase IX (Protox) required for the formation of chlorophyll. Inhibition of the PPO IX enzyme results in the liberation of singlet oxygen (O) that, in turn, disrupts cellular membranes and causes cellular leakage. The ultimate manifestation of the process is cellular death leading to plant death. The selective herbicidal activity of sulfentrazone is based on its greater affinity for the PPO IX enzyme in weed species versus crop plants.

Mechanism of Action

Following the application of SZ-75 Herbicide to soil, germinating seeds and seedlings take up sulfentrazone from the soil solution. The amount of sulfentrazone in soil solution, and available for weed uptake, is determined primarily by soil type, organic matter and soil pH. Sulfentrazone adsorbs to the clay and organic matter fractions of soils effectively limiting the amount of active

ingredient immediately available to control weeds. Soils typically increase in clay content through the series from coarse to fine as noted in the following Soil Classification Chart.

Soil Classification Chart

Coarse*	Medium	Fine
Sand	Sandy clay loam	Silty clay loam
Loamy sand	Sandy clay	Silty clay
Sandy loam	Loam	Clay loam
	Silt loam	Clay
	Silt	

***DO NOT** apply to coarse soils.

Influence of Soil Type, Organic Matter and pH on SZ-75 Herbicide Use Rates and Crop Response

Soil organic matter content can vary widely and independently of soil type and requires an accurate analysis of representative soil samples to determine its content. Soil pH also exerts a dramatic effect on sulfentrazone availability in the soil solution. As soil pH increases, sulfentrazone availability increases. Determining soil pH requires an accurate analysis of representative soil samples.

The total amount of sulfentrazone available in solution, in any given soil, is determined by the interaction of soil type (primarily clay content), % organic matter and pH. The application timing (relative to the emergence of the crop and weeds) and amount of rainfall and/or irrigation received will ultimately determine, in conjunction with the soil parameters and pH, the amount of sulfentrazone in soil solution. It is important to note that SZ-75 Herbicide can await activating moisture. However, diminished weed control may result due to the successive increase in weed growth versus timing of activation.

It is important to note that irrigation with highly alkaline water (high pH) following an SZ-75 Herbicide soil application can also significantly increase the amount of sulfentrazone available, in the soil solution. Irrigation with water having a pH greater than 7.5 could result in adverse crop response. This response will ultimately depend on initial SZ-75 Herbicide application rate, timing, amount and pH of irrigation water and sensitivity of the crop and its growth stage when irrigated. The risk of adverse crop response will lessen with the advances in growth stages among most crops.

Sulfentrazone is persistent and will last in the soils (carryover) for one to two years. DO NOT APPLY SZ-75 HERBICIDE TO FIELDS PREVIOUSLY TREATED WITH SZ-75 HERBICIDE or any other product that contains sulfentrazone IN CONSECUTIVE YEARS (24 MONTHS). In case of drought in any of those years, a subsequent application of SZ-75 Herbicide should be further delayed by the equivalent number of years in which drought occurred. SZ-75 Herbicide requires one (1) to two (2) cm of rain or irrigation water to be effective. If adequate moisture from rainfall or irrigation is not received within 7 to 10 days of application, a shallow incorporation no deeper than 5 cm may be needed to obtain adequate weed control.

SECTION 10.2: BUFFER ZONES

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 freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands).

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:		
		Freshwater Habitat of Depths:		Terrestrial Habitat
		Less than 1 m	Greater than 1 m	
Field sprayer	Chickpea, Field Pea, Flax, Sunflower, Soybean	1	0	10

For tank mixes, 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 Pest Management Regulatory Agency web site.

SECTION 10.3: ROTATIONAL CROP GUIDELINES

The following table shows the minimum interval in months from the time of the last SZ-75 Herbicide application until SZ-75 Herbicide (or AUTHORITY® 480 Herbicide) treated soil can be replanted to the crops listed as follows.

Rotational crops and replant intervals for SZ-75 Herbicide.

Rotational Crop	Replant Interval (Months)
Alfalfa	12
Barley	12
Broccoli	Anytime
Cabbage	Anytime
Canola	12
Cauliflower	Anytime
Chickpea	Anytime
Corn, field	12

Corn, sweet and pop	24
Faba bean	Anytime
Field pea	Anytime
Flax	Anytime
Horse radish	Anytime
Lentils	24
Potatoes	Anytime
Sorghum	24
Soybeans	Anytime
Sunflowers	Anytime
Spring and Durum wheat	12
Tame mustard	Anytime (low rate only)
Tomato (transplants)	Anytime
Winter wheat	4

For crops listed in the rotational crop table, the minimum replant interval listed in the table must be observed. For crops not listed in the rotational crop table, A MINIMUM ROTATIONAL CROP INTERVAL OF 36 MONTHS must be observed and a representative bioassay of the field must be conducted with the rotational crop and adequate soil moisture to evaluate potential crop sensitivity.

If there is a lack of adequate or normal soil moisture due to drought conditions following an application of SZ-75 Herbicide, the minimum rotational crop interval listed in the table must be extended for one additional year and a representative bioassay of the field must be conducted with the potential rotational crop and adequate soil moisture to determine the crop sensitivity to SZ-75 Herbicide.

REPLANTING INSTRUCTIONS

If initial planting of labeled crops fails to produce a stand, only labeled crops for SZ-75 Herbicide, may be planted. **DO NOT** retreat field with SZ-75 Herbicide. Do not plant treated fields with any crop at intervals that are inconsistent with the Rotational Crop Guidelines on this label. When replanting use minimum soil tillage to preserve the herbicide barrier and achieve maximum weed control.

SECTION 11: RESTRICTED ENTRY INTERVAL

DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

IMPORTANT

- **DO NOT** apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your area, consult the provincial agency responsible for pesticide regulation.
- **DO NOT** apply more than the allowed amount per hectare per twelve-month period. The twelve-month period is considered to begin upon the initial application.

SECTION 12: MIXING AND LOADING INSTRUCTIONS

Spray Tank Preparation

It is important that spray equipment is clean and free of existing pesticide deposits before using this product. Follow the spray tank clean out procedures specified on the label of product previously applied before adding SZ-75 Herbicide to the tank.

Mixing and Loading Instructions

SZ-75 Herbicide is a water dispersible granule intended for dilution with water. For best results, fill spray tank with one half of the volume of clean water needed for the area to be treated. Start the agitation system. Slowly add the SZ-75 Herbicide to the spray tank. Complete filling the spray tank to the desired level. Continuous spray tank agitation is required at all times to maintain a uniform spray solution. Make sure SZ-75 Herbicide is thoroughly mixed before application.

Use the SZ-75 Herbicide mixture immediately after mixing.

Do not store the sprayer overnight or for any extended period of time with the sulfentrazone spray mixture remaining in the tank.

Premixing SZ-75 Herbicide spray solutions in nurse tanks is not recommended.

Tank Mixtures: Fill spray tank one-half to two-thirds full of water; with agitator operating add the recommended amount of ingredients using the following order:

- **Wettable powders and dispersible granules**
- **Agitate tank mix thoroughly**
- **Micro-encapsulated suspensions**
- **Liquid flowables and suspensions**
- **Emulsifiable concentrate formulations**
 - Fill spray tank nearly full of water
- **Glyphosate formulations**
- **Surfactants**
 - Complete filling the spray tank to the desired level

Maintain agitation during filling, mixing and application. When using drift reducing agents, follow specific product label instructions for order of addition to spray tank.

SECTION 13: SPRAYER EQUIPMENT CLEANOUT

After spraying SZ-75 Herbicide and before using sprayer equipment for any other applications, the sprayer must be thoroughly cleaned using the following procedure:

1. Drain sprayer tank, hoses, and spray boom. Use a high-pressure detergent wash to remove physical sediment and residues from the inside of the sprayer tank and thoroughly rinse. Then thoroughly flush all sprayer hoses, booms, and nozzles with clean water.
2. Prepare a sprayer cleaning solution by adding three litres of ammonia (containing at least 3% active) per 100 litres of clean water. Prepare sufficient cleaning solution to allow the operation of the spray system for a minimum of 15 minutes to thoroughly flush hoses, spray boom and spray nozzles.
3. Convenient and thorough cleaning of the sprayer can be achieved if the ammonia solution or fresh water is left in the spray tank, hoses, spray booms and spray nozzles overnight or during storage.
4. Drain the sprayer system. Rinse the tank with clean water and flush through the hoses, boom, and nozzles. Remove and clean spray tips and all strainers and screens separately in an ammonia solution.
5. Properly dispose of all cleaning solution and rinsate in accordance with provincial guidelines and regulations.

Do not drain or flush equipment on or near desirable trees or plants.

Do not contaminate any body of water including irrigation water that may be used on other plants or crops.

SECTION 14: RESISTANCE MANAGEMENT RECOMMENDATIONS

For resistance management, SZ-75 Herbicide is a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to SZ-75 Herbicide and other Group 14 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

- 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.
- Where possible, rotate the use of SZ-75 Herbicide or other Group 14 herbicides within a growing season (sequence) or among growing seasons with different groups that control the same weeds in a field.
- 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 at <https://aq.fmc.com/ca/en>

®/TM AUTHORITY, EXPRESS and FOCUS are trademarks of FMC Corporation or an affiliate.

All other products (Agral, Classic, Boundary LQD, Frontier, Conquest and Pursuit) listed are trademarks of their respective companies.