

Container Label

GROUP

15

HERBICIDE

**ZIDUA™ SC**

**HERBICIDE**

**SUSPENSION CONCENTRATE**

**COMMERCIAL (AGRICULTURAL)**

**ACTIVE INGREDIENT:** Pyroxasulfone..... 500 g/L

Contains 1,2-benzisothiazolin-3-one and 2-methyl-4-isothiazolin-3-one, each at 0.0043%, as preservatives

**OR**

Contains 1,2-benzisothiazolin-3-one at 0.03800%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00111%, 2-methyl-4-isothiazolin-3-one at 0.00037% and 2-bromo-2-nitropropane-1,3-diol at 0.02400%, as preservatives

**REGISTRATION NO. 32542**

**PEST CONTROL PRODUCTS ACT**

**IN CASE OF EMERGENCY ENDANGERING LIFE OR PROPERTY  
INVOLVING THIS PRODUCT, CALL DAY OR NIGHT,  
1-800-454-2673**

**Warning, contains the allergen soy**

**READ THE LABEL AND BOOKLET BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**

NET CONTENTS: 0.1 L to 1000 L

BASF Canada Inc.  
100 Milverton Drive, 5th Floor  
Mississauga, ON L5R 4H1  
1-877-371-2273

ZIDUA is a trademark of BASF SE, used with permission by BASF Canada Inc.

## **PRECAUTIONS**

Avoid contact with skin, eyes or clothing.

During mixing, loading, clean-up and repair, wear a long-sleeved shirt, long pants, chemical resistant gloves and shoes plus socks. Applicators must wear a long-sleeved shirt, long pants and shoes plus socks.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

Application is limited to agricultural crops only when there is low risk of drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Do not apply by air.

### **[Optional statement for smaller container sizes]**

Please refer to the booklet for the complete list of precautions.

Avoid contact with skin, eyes or clothing.

Do not apply by air.

## **FIRST AID**

### **If swallowed**

Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

### **If on skin or clothing**

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

### **If Inhaled**

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

**If in eyes**

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

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

**TOXICOLOGICAL INFORMATION**

Treat symptomatically.

**ENVIRONMENTAL HAZARDS**

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

This product demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of **ZIDUA SC** in areas where soils are permeable, particularly where the water table is shallow, may result in ground water 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 strip between the treated area and the edge of the water body.

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.

**STORAGE**

Store in original container in cool, dry, well-ventilated location.

To prevent contamination, store this product away from food or feed.

**DISPOSAL****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 rinsing 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.

#### **Returnable-Refillable Containers**

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

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

#### **NOTICE TO USER**

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

Booklet

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## **GENERAL INFORMATION**

**ZIDUA SC** is a suspension concentrate herbicide for the control of labelled annual grasses and annual broadleaf weeds in corn, soybeans, lentils and dry field peas.

## **PRECAUTIONS**

1. **KEEP OUT OF REACH OF CHILDREN.**
2. Avoid contact with skin, eyes or clothing.
3. During mixing, loading, clean- up and repair, wear a long sleeved shirt, long pants, chemical resistant gloves and shoes plus socks. Applicators must wear a long sleeved shirt, long pants and shoes plus socks.
4. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions exist for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

5. Application is limited to agricultural crops only when there is low risk of drift to areas of human habitation or activity such as houses, cottages, schools and recreational areas, taking into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.
6. Do not apply by air.

## **FIRST AID**

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Treat symptomatically.

**ENVIRONMENTAL HAZARDS**

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## DISPOSAL

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## NOTICE TO USER

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## DIRECTIONS FOR USE

### WEEDS CONTROLLED

**ZIDUA SC** may be applied to corn or soybeans at a rate of 250 – 493 mL/ha for the control of the following weeds:

<b>Annual grasses</b>	<b>Annual Broadleaf Weeds</b>
Barnyard grass	Common waterhemp
Crabgrass (large)	Redroot pigweed
Foxtail (green, yellow, giant)	
Ryegrass (Italian)	



Application rates of **ZIDUA SC** may vary depending on soil texture. Refer to the table below for soil texture groups used in the rate tables throughout this label unless a specific soil texture is mentioned. The table below includes a complete listing of soil textures included in each of the soil texture groupings.

### Soil Textures

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

### WEEDS SUPPRESSED - Early season residual suppression

**ZIDUA SC** may be applied to lentils at a rate of 120 – 180 mL/ha, or to corn, soybeans and field peas at a rate of 120 – 240 mL/ha for the early season residual suppression of the weeds listed below when an in-crop application of another registered herbicide is planned. Application rates are for all soil types. Use the higher rate in the listed rate range for longer residual and under heavier weed populations.

Annual grasses	Annual Broadleaf Weeds
Foxtail (green and yellow)	Common waterhemp
Kochia	Lamb's quarters
Wild oat	Redroot pigweed

### APPLICATION INFORMATION

Moisture is necessary to activate the active ingredient pyroxasulfone in soil for weed control. Dry weather following applications of **ZIDUA SC** may reduce effectiveness. However, when adequate moisture is received after dry conditions, **ZIDUA SC** will control susceptible germinating weeds. **ZIDUA SC** 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 **ZIDUA SC** application, weed control may be improved by irrigation.

When applying **ZIDUA SC** with glyphosate as a tank mix partner, use glyphosate present as isopropylamine, potassium, or diammonium salt.

**Do not** use flood irrigation to activate or incorporate **ZIDUA SC**.

**DO NOT** use on peat or muck soils and soils with 7% or more organic matter content.

**DO NOT** apply by air.

**DO NOT** apply through any type of irrigation system.

**DO NOT** contaminate irrigation ditches or water used for domestic purposes.

**DO NOT** apply **ZIDUA SC** or **ZIDUA SC** tank mixtures when environmental conditions may result in drift to non- target sites.

**DO NOT** make more than one application per season.

Drift of this product may be harmful to non-target plants near the treatment area.

**DO NOT** apply during periods of gusty winds.

Apply in a minimum water volume of 100 L/ha in Eastern Canada. Apply in a water volume of 50 to 100 L/ha in Western Canada.

Consult nozzle manufacturers recommendation for spray pressures for specific nozzles.

Applications to crops under stress due to either inadequate or excess of moisture for normal crop development, cool and hot temperatures, sodic soils, poorly drained soils, hail damage, flooding, pesticide injury, mechanical injury or widely fluctuating temperatures may result in crop injury.

When applied as a tank-mix combination, read and observe all label directions, including rates, personal protective equipment, restrictions, precautions and grazing limitations for each product used in the tank-mix. Always use in accordance with the most restrictive label restrictions and precautions.

## FIELD CORN

**ZIDUA SC** can be applied as a pre-plant surface, pre-emergence or early post-emergence treatment to field corn up to the 4 leaf stage of corn. Crop seeds must be planted a minimum 2.5 cm deep.

**ZIDUA SC** must be applied and activated prior to weed seedling emergence.

Application timing	Product	Rate / ha by soil texture			
		Coarse	Medium- Fine soil		Fine
	OM ≤ 3%		3% < OM < 7%		
Pre-plant (up to 30 days before planting) or Pre-emergent or Early post-emergent (up to 4 leaf stage of corn)	<b>ZIDUA SC</b> alone	250 mL/ha	332 mL/ha	417 mL/ha	493 mL/ha

## Tank Mix Options

**ZIDUA SC** may also be applied in tank mix with the following products for the control of weeds in addition to those on the **ZIDUA SC** label.

Application timing	Product	Rate / ha
Pre-plant (up to 30 days before planting) or Pre-emergent	<b>ZIDUA SC</b>	See Application rate table for <b>ZIDUA SC</b> applied alone.
	+ glyphosate	Refer to glyphosate label for weeds controlled and registered rates.
Pre-plant (up to 30 days before planting) or Pre-emergent or Early post-emergent	<b>ZIDUA SC</b>	See Application rate table for <b>ZIDUA SC</b> applied alone.
	+ Aatrex Liquid 480	2.1 - 3.1 L

## FIELD CORN - Early season residual suppression

**ZIDUA SC** can be applied as a pre-plant surface, pre-emergence or early post-emergence treatment to field corn up to the 4 leaf stage of corn. Crop seeds must be planted a minimum 2.5 cm deep.

**ZIDUA SC** must be applied and activated prior to weed seedling emergence.

Application timing	Product	Rate
Pre-plant (up to 30 days before planting) or Pre-emergent or Early post-emergent (up to 4 leaf stage of corn)	<b>ZIDUA SC</b>	120 - 240 mL/ha

## Tank Mix Option

**ZIDUA SC** may also be applied in tank mix for the control of weeds in addition to those on the **ZIDUA SC** label. For all tank mixes, apply **ZIDUA SC** at 120 – 240 mL/ha. Tank mix products and rates are detailed in the following table.

Application timing	Product	Rate
Pre-plant (up to 30 days before planting) or Pre-emergent	Glyphosate	Refer to glyphosate label for weeds controlled and registered rates.
	Aatrex Liquid 480	2.1 - 3.1 L/ ha
	ERAGON LQ + MERGE Adjuvant + glyphosate	146 - 292 mL/ha 1 L/ha 2.5 L/ha (360 g/L equivalent)
	HEAT LQ + MERGE Adjuvant + glyphosate	53 - 146 mL/ha 0.5 - 1 L/ha 1.25 - 2.5 L/ha (360 g/L equivalent)
	INTEGRITY + glyphosate	0.73 - 1.1 L/ha <sup>1, 2</sup> 2.5 L/ha (360 g/L equivalent)

<sup>1</sup> For pre-plant application, use 1.1 L/ha rate only.

<sup>2</sup> When applying 1.1 L/ha as pre-plant or pre-emergent treatment, DO NOT apply to field corn grown on coarse soils with a Cation Exchange Capacity (CEC) less than or equal to 15 MEQ/100 g, as injury may occur.

Application timing	Product	Rate
Early post-emergent <sup>1,2</sup>	Glyphosate	Refer to glyphosate label for weeds controlled and registered rates.
	Aatrex Liquid 480	2.1 - 3.1 L/ha
	Marksman Herbicide + glyphosate	2.5 - 3.7 L/ha 2.5 L/ha (360 g/L equivalent)
	Armezon herbicide + glyphosate <sup>3</sup>	37 mL/ha 2.5 L/ha (360 g/L equivalent)

<sup>1</sup> Apply glyphosate on glyphosate tolerant field corn varieties only

<sup>2</sup> Apply post-emergent application up to 4 leaf stage of corn when tank mixing with glyphosate, Marksman Herbicide or Armezon herbicide

<sup>3</sup> Glyphosate present as isopropylamine salt or potassium salt

## SOYBEANS

**ZIDUA SC** can be applied as a pre-plant surface or pre-emergence treatment to soybeans. Crop seeds must be planted a minimum 4 cm deep. **Do not** apply **ZIDUA SC** if soybeans have emerged.

The use of **ZIDUA SC** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during soybean germination or early seedling development. These suppressions have not resulted in reduced soybean yield potential.

**ZIDUA SC** must be applied and activated prior to weed seedling emergence.

Application timing	Product	Rate / ha by soil texture			
		Coarse	Medium- Fine soil		Fine
Pre-plant (up to 30 days before planting) or Pre-emergent	<b>ZIDUA SC</b> alone		OM ≤ 3%	3% < OM < 7%	
				250 mL/ha	332 mL/ha

## Tank Mix Option

**ZIDUA SC** may also be applied in tank mix with glyphosate for the control of weeds in addition to those on the **ZIDUA SC** label.

Application timing	Product	Rate/ ha
Pre-plant (up to 30 days before planting) or Pre-emergent	<b>ZIDUA SC</b>	See Application rate table for <b>ZIDUA SC</b> applied alone.
	+ glyphosate	Refer to glyphosate label for weeds controlled and registered rates.

## SOYBEANS - Early season residual suppression

**ZIDUA SC** can be applied as a pre-plant surface or pre-emergence treatment to soybeans. Crop seeds must be planted a minimum 4 cm deep. Do not apply **ZIDUA SC** if soybeans have emerged.

The use of **ZIDUA SC** may result in temporary growth suppression if extreme conditions of high rainfall and extended periods of water-saturated soil occur during soybean germination or early seedling development. These suppressions have not resulted in reduced soybean yield potential.

**ZIDUA SC** must be applied and activated prior to weed seedling emergence.

Application timing	Product	Rate
Pre-plant (up to 30 days before planting) or Pre-emergent	<b>ZIDUA SC</b>	120 - 240 mL/ha

## Tank Mix Option

**ZIDUA SC** may also be applied in tank mix for the control of weeds in addition to those on the **ZIDUA SC** label. For all tank mixes, apply **ZIDUA SC** at 120 – 240 mL/ha. Tank mix products and rates are detailed in the following table.

Application timing	Product	Rate
Pre-plant <sup>1</sup> or Pre-emergent	Glyphosate	Refer to glyphosate label for weeds controlled and registered rates.
	ERAGON LQ <sup>2,3</sup> + MERGE Adjuvant + glyphosate	73 mL/ha 1 L/ha 2.5 L/ha (360 g/L equivalent)
	HEAT LQ + MERGE Adjuvant + glyphosate	53 – 73 mL/ha 0.5 - 1 L/ha 1.25 - 2.5 L/ha (360 g/L equivalent)
	ENGENIA <sup>4</sup> + glyphosate <sup>5</sup>	0.480 - 1 L/ha 900 g ae/ha

	INTEGRITY <sup>2,3</sup> + MERGE Adjuvant + glyphosate	0.37 L/ha 1 L/ha Refer to glyphosate label for weeds controlled and registered rates.
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- <sup>1</sup> Apply pre-plant up to 30 days before planting when tank mixing with glyphosate alone or with ENGENIA
- <sup>2</sup> Apply pre-plant up to 21 days before planting
- <sup>3</sup> For Pre-emergent timing, apply prior to when the soybeans cause the ground to crack and no more than three days after planting. DO NOT apply to coarse textured soils with less than 2% organic matter.
- <sup>4</sup> Apply ENGENIA only to Roundup Ready 2 Xtend Soybeans. SOYBEAN VARIETIES WHICH ARE NOT DESIGNATED AS DICAMBA TOLERANT WILL BE DAMAGED OR DESTROYED BY THIS TREATMENT.
- <sup>5</sup> Only use glyphosate products present as an isopropylamine or potassium salt registered for use in soybeans. Do not tank-mix ENGENIA with glyphosate products where glyphosate is present as an ammonium salt.

### LENTILS AND PEAS (DRIED FIELD) - Early season residual suppression

Apply **ZIDUA SC** as a pre-seed or pre-emergent treatment to lentils and dry field peas. Do not apply **ZIDUA SC** to lentils at a rate greater than 180 mL/ha or crop injury may result. Crop seeds must be planted a minimum 2.5 cm deep. **ZIDUA SC** must be applied and activated prior to weed seedling emergence or in a tank mixture that controls the emerged weeds such as HEAT LQ and glyphosate.

Crop	Application timing	Rate
Lentils	Pre-seed <b>or</b> pre-emergent	120 – 180 mL/ha <sup>1</sup>
Peas (dried field)	Pre-seed <b>or</b> pre-emergent	120 – 240 mL/ha

<sup>1</sup> Do not apply **ZIDUA SC** at a rate greater than 180 mL/ha or crop injury may result.

### Tank Mix Option

For rapid burndown control of broadleaf and grass weeds in addition to the control of weeds listed above, **ZIDUA SC** may be applied as a pre-seed or pre-emergent treatment in tank mix combination with glyphosate or HEAT LQ and glyphosate. For the tank mix combination of HEAT LQ and glyphosate, apply in 50-100 L/ha of water with MERGE® Adjuvant at a rate of 0.5 – 1.0 L/ha. Consult the HEAT LQ and glyphosate labels for a complete list of weeds controlled by HEAT LQ and glyphosate.

Use only glyphosate products registered for pre-seed application to field peas and lentils.

For all tank mixes applied to lentils, use **ZIDUA SC** at 120 – 180 mL/ha. For all tank mixes applied to dried field peas, use **ZIDUA SC** at 120- 240 mL/ha. Tank mix products and rates are detailed in the following table.

Application timing	Product	Rate
Pre-seed or Pre-emergent	Glyphosate	1.25 - 2.5 L/ha (360 g/L equivalent) <sup>1</sup>
	HEAT LQ + MERGE Adjuvant + glyphosate	53- 146 mL/ha <sup>2</sup> 0.5 - 1 L/ha 1.25 - 2.5 L/ha (360 g/L equivalent) <sup>1</sup>

<sup>1</sup> Other glyphosate formulations may require a rate calculation adjustment according to active ingredient concentration. Refer to the glyphosate label for rate and weeds controlled.

<sup>2</sup> Rate restrictions apply for lentils. DO NOT use HEAT LQ at a rate higher than 53 mL/ha for lentils or crop injury may result.

## MIXING INSTRUCTIONS

### Mixing Order

1. When applying **ZIDUA SC**, always start with a clean sprayer. Thoroughly clean the sprayer by flushing the system with water containing detergent. Refer to previously applied product labels for specific cleaning instructions.
2. Fill clean spray tank half full with clean water. Start agitation system.
3. If needed, add the correct amount of water conditioner.
4. If using a wettable powder or water dispersible granule tank mix partner add the correct amount to the tank and continue agitation until thoroughly dispersed.
5. If required, add the correct amount of micro-encapsulated product tank mix partner.
6. Using a calibrated measuring device, add the correct amount of **ZIDUA SC**. Continue to agitate.
7. If required, add the correct amount of liquid, solution or suspension product tank mix partner.
8. If required, add in the correct amount of emulsifiable concentrate product tank mix partner.
9. If required, add the correct amount of glyphosate product tank mix partner.
10. If required, add in the correct amount of adjuvants or surfactants last.
11. Continue agitation while filling the spray tank with the remaining amount of water.
12. Continue to agitate or run the by-pass system.
13. After any break in spraying operation, agitate thoroughly before spraying again. Check inside the tank to ensure that sprayer agitation is sufficient to remix the spray materials. Do not allow the mixture to sit overnight.

14. If an oil film starts to build up in the tank, drain it and clean the tank with strong detergent solution.
15. Immediately after use, thoroughly clean the sprayer by flushing the system with clean water containing detergent.

Dispose of all rinsate in accordance with provincial regulations.

## **CLEANING SPRAY EQUIPMENT**

Clean application equipment thoroughly by using a strong detergent or commercial sprayer cleaner according to the manufacturer's directions. Triple rinse the equipment before and after applying **ZIDUA SC**.

Refer to the tank mix partner's product label for any additional cleaning instructions not included in the above steps.

## **CROP ROTATIONAL RESTRICTION**

### Plant Back (in case of crop failure)

If any crop treated with **ZIDUA SC** is lost, re-plant only labelled crops (field corn, soybean, lentil and field peas) ensuring the rate of **ZIDUA SC** applied does not exceed the maximum use rate for the crop being re-planted. Do not make a second application of **ZIDUA SC**.

### Rotational Cropping

Fields treated with **ZIDUA SC** at the early season residual suppression rate (120 mL/ha – 240 mL/ha) can be seeded the following season to field corn, soybean, spring wheat, chickpea, lentil, field pea and flax. Winter wheat may be seeded 4 months following the **ZIDUA SC** application. Durum wheat, barley and oats can be seeded 11 months following the **ZIDUA SC** application. Canola can be seeded 12 months following the **ZIDUA SC** application.

For all other application rates higher than 240 mL/ha, corn, soybean, chickpea, lentil, field pea and flax may be seeded the following season. Winter wheat may be seeded 4 months following the **ZIDUA SC** application.

Conduct a field bioassay (a test strip grown to maturity) to confirm crop safety prior to seeding any rotational crops other than field corn, soybean, wheat, chickpea, lentil, field peas, flax, canola, barley, durum wheat and oats.



## RESTRICTIONS AND LIMITATIONS

1. **DO NOT** apply by air.
2. **DO NOT** use on peat or muck soils and soils with 7% or more organic matter content.
3. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval of 12 hours.
4. **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
5. As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.
6. 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 BASF at 1-877-371-2273 or [www.agsolutions.ca](http://www.agsolutions.ca) for information before mixing any pesticide or fertilizer that is not specifically recommended on this label. The user assumes the risk of losses that result from the use of tank mixes that do not appear on this label or that are not specifically recommended by BASF.

## BUFFER ZONES

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) medium classification. Boom height must be 60 cm or less above the crop or ground.

**DO NOT** apply by air.

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

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), 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	Field corn Soybeans Lentils Field peas	5	3	1

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.

## RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, **ZIDUA SC** is a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to **ZIDUA SC** and other 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 **ZIDUA SC** or other Group 15 herbicide 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 BASF at 1-877-371-2273 or at [www.agsolutions.ca](http://www.agsolutions.ca).

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