

2022-0975
2022-03-04

Container Label

GROUP	2	14	15	HERBICIDE
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ZIDUA™ PRO

HERBICIDE

SUSPENSION CONCENTRATE

COMMERCIAL

FOR SALE FOR USE IN EASTERN CANADA ONLY

ACTIVE INGREDIENTS: Saflufenacil..... 57 g/L
Imazethapyr..... 159.5 g/L
Pyroxasulfone..... 273.5 g/L

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

OR

Contains 2-bromo-2-nitropropane-1,3-diol at 0.0150%, 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00143% and 2-methyl-4-isothiazolin-3-one at 0.00048%, as preservatives

OR

Contains 2-bromo-2-nitropropane-1,3-diol at 0.0252% and 1,2-benzisothiazolin-3-one at 0.0328%, as preservatives

OR

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.00144%, 2-methyl-4-isothiazolin-3-one at 0.00048% and 2-bromo-2-nitropropane-1,3-diol at 0.0252%, as preservatives

REGISTRATION NO. 33355

PEST CONTROL PRODUCTS ACT

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

READ THE LABEL AND BOOKLET BEFORE USING

KEEP OUT OF REACH OF CHILDREN

NET CONTENTS: 0.1 L to 1000 L

BASF Canada Inc.
5025 Creekbank Road
Building A, 2nd Floor
Mississauga, Ontario L4W 0B6

1-877-371-2273

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

PRECAUTIONS

1. **KEEP OUT OF REACH OF CHILDREN.**
2. **DO NOT** take internally.
3. 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.
4. 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.
5. 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.

If clothing becomes contaminated, remove immediately and wash. Store and wash all protective clothing separately from household laundry. Wash in detergent and hot water before reuse. Wear freshly laundered clothes daily.

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.

6. 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.

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.

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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 demonstrated 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 strip between the treated area and the edge of the water body.

STORAGE

Store in original container in cool, dry, well-ventilated area without floor drain.

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

Herbicides should be shipped or stored separately from other pesticides to avoid cross-contamination.

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:

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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.

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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.

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Booklet

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GENERAL INFORMATION

ZIDUA PRO is a suspension concentrate herbicide for the control of labelled annual grasses and annual broadleaf weeds in soybeans.

SAFETY AND HANDLING

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DIRECTIONS FOR USE

WEEDS, RATES AND TIMING

ZIDUA PRO at a rate of 440 mL/ha is applied in tank-mix combination with glyphosate and MERGE Adjuvant as a pre-plant or pre-emergent application in soybeans. This treatment is recommended when there is a planned in-crop application of another registered herbicide. Crop seeds must be planted a minimum 4 cm deep.

Consult nozzle manufacturers recommendation for spray pressures for specific nozzles.

The use of **ZIDUA PRO** 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.

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.

ZIDUA PRO is compatible with all liquid glyphosate formulations registered for use as a pre-plant treatment prior to soybeans in which glyphosate is present as an isopropylamine salt, diammonium salt or potassium salt, as a tank mix-partner. Refer to the glyphosate label for rates and weeds controlled in addition to those listed below. Apply to weeds less than 15 cm in height, according to the glyphosate label. Refer to the glyphosate label for further recommendations, precautions and restrictions.

Timing	Pre-plant surface application or pre-emergent application
Rate	440 mL/ha ZIDUA PRO + glyphosate (refer to glyphosate label for rates)
Water Volume	Apply in a water volume minimum 100 L/ha.
Surfactant/Adjuvant	Add MERGE Adjuvant at a rate of 1 L/ha.

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Remarks	<p>For Pre-plant timing, apply pre-plant from 21 days prior to planting up to the day of planting.</p> <p>For Pre-emergent timing, apply prior to when the soybeans cause the ground to crack and no more than 3 days after planting.</p> <p>For Pre-emergent timing, DO NOT apply to coarse textured soils with less than 2% organic matter.</p> <p>DO NOT incorporate as injury may result.</p>
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ZIDUA PRO is recommended for the burndown control and residual control of the following broadleaf and grass weeds.

Weeds	Level of Control C = Control S = Suppression		Maximum Weed Stage for Burndown Application
	Burndown Control	Residual Control	
Broadleaf Weeds			
Broadleaf plantain	C	C	Beginning of flowering
Canada fleabane	C ³	C ³	20 leaf
Common chickweed	C	C	8 leaf
Common ragweed	C ³	C ^{1, 2}	8 leaf
Common waterhemp	C ³	C ³	
Dandelion (suppression only)	S	S	6 leaf
Giant ragweed	C ³		8 leaf
Lamb's-quarters	C	C ^{1, 2}	8 leaf
Lady's thumb	C		6 leaf
Perennial sow thistle (top growth burndown control)	C		8 leaf
Prickly lettuce (top growth only)	C	C	9 leaf
Redroot pigweed	C	C ^{1, 2}	8 leaf
Shepherd's- purse	C	C	Full flower
Stinkweed	C		Full flower
Wild buckwheat	C		6 leaf
Wild mustard	C		8 leaf
Grasses			
Barnyard grass	C	C	
Crabgrass (large)	C	C	
Foxtail (green, yellow, giant)	C	C	
Ryegrass (Italian)		C	

¹ Group 2 resistant biotypes exist. If the resistant biotypes are present, adequate residual control may not be achieved with this tankmix.

² Includes triazine-resistant biotypes

³ Includes glyphosate-resistant biotypes

FACTORS AFFECTING ZIDUA PRO PERFORMANCE

Residual pre-plant or pre-emergent applications of **ZIDUA PRO** must be activated by at least ½ inch of rainfall or sprinkler irrigation prior to weed seedling emergence (flood irrigation may not be used). Reduced weed control may occur if adequate moisture is not received.

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MIXING INSTRUCTIONS

1. When applying **ZIDUA PRO**, 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 PRO**. 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 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 PRO**.

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

FOLLOW CROPPING

If any crop treated with **ZIDUA PRO** is lost, soybean can be replanted in the same season. A second application of **ZIDUA PRO** cannot be made in the rescue crop.

Rotational Crops

Fields treated with **ZIDUA PRO** can be seeded to field corn, soybean and spring wheat the following year and winter wheat¹ with a four-month re-cropping interval. 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 and wheat.

¹ Soil preparation for re-planting should be no deeper than 10 cm.

RESTRICTIONS AND LIMITATIONS

1. **DO NOT** apply by air.
2. **DO NOT** apply through any type of irrigation system.
3. **DO NOT** apply **ZIDUA PRO** or **ZIDUA PRO** tank mixtures when environmental conditions may result in drift to non- target sites.
4. Drift of this product may be harmful to non-target plants near the treatment area. **DO NOT** apply during periods of gusty winds.
5. **DO NOT** use on peat or muck soils and soils with 7% or more organic matter content.
6. For applications in soybeans, **DO NOT** incorporate **ZIDUA PRO** as injury may result.
7. **DO NOT** apply to soybeans within 100 days of harvest.
8. **DO NOT** graze or feed treated soybean forage, hay or straw to livestock.
9. **ONLY ONE (1)** application of **ZIDUA PRO** may be made during the season.

10. DO NOT let spray drift contaminate crops in adjacent fields.
11. **DO NOT** enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.
12. **DO NOT** contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.
13. Clean sprayer thoroughly after use to avoid damage to the next crop sprayed.
14. As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.
15. 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 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 using aerial application equipment.

Spot treatments using hand-held equipment **DO NOT** require a buffer zone.

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 Habitats (m)
		Less than 1 m	Greater than 1 m	
Field sprayer	Soybeans	5	3	1

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

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

RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, please note that **ZIDUA PRO** is a Group 2, a Group 14 and a Group 15 herbicide. Any weed population may contain or develop plants naturally resistant to **ZIDUA PRO** and other Group 2, 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 **ZIDUA PRO** or other Group 2, Group 14 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 or to report suspected resistance, contact BASF at 1-877-371-2273 or at www.agsolutions.ca.

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