

Supplemental Label



Zidua®
Herbicide

For weed control in sunflower

This supplemental label expires May 31, 2020, and must not be used or distributed after this date.

Active Ingredient:

pyroxasulfone: 3-[[[5-(difluoromethoxy)-1-methyl-3-(trifluoromethyl)-1 <i>H</i> -pyrazol-4-yl]methyl]sulfonyl]-4,5-dihydro-5,5-dimethylisoxazole	85.0%
Other Ingredients:	15.0%
Total:	100.0%

Contains 0.85 pound of pyroxasulfone per pound formulated as a water-dispersible granule (WG)

EPA Reg. No. 7969-338
CAUTION/PRECAUCION

Directions For Use

- It is a violation of federal law to use this product in a manner inconsistent with its labeling.
- The supplemental labeling and the entire **Zidua® herbicide** container label, EPA Reg. No. 7969-338, must be in possession of the user at the time of application.
- Read the label affixed to the container for **Zidua** before applying.
- Use of **Zidua** according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for **Zidua**.

Application Information

Zidua may be applied preplant surface, preemergence, or early postemergence to sunflower for residual preemergence weed control.

Before applying to sunflower, verify with your local seed company (supplier), university extension specialist (e.g., weed scientist, county agent, etc.), or BASF representative the selectivity of **Zidua** on your hybrid/variety to avoid potential injury.

Product Information

Zidua is a selective rate-dependent residual preemergence herbicide for controlling annual grasses, sedges, and annual broadleaf weeds. Refer to the **Zidua** container label for a complete list of weeds controlled.

Periods of dry weather following application of **Zidua** may reduce herbicidal effectiveness. **Zidua** must be activated by at least 1/2 inch of rainfall or irrigation before weed germination and emergence. When **Zidua** is not activated and weeds emerge, a labeled postemergence herbicide or shallow cultivation may be needed to control weed escapes. **Zidua** does not control emerged weeds.

Application Rate

Apply **Zidua® herbicide** alone, in tank mix, or sequentially in sunflower at the residual rates provided in **Table 1**.

Table 1. Residual Rates of Zidua in Sunflower

Application Timing	Use Rate by Soil Texture ¹ (ozs/A)		
	Coarse	Medium	Fine
Preplant surface	1.0 to 1.5	1.5 to 3.0	3.0 to 4.0
Preemergence	1.0 to 1.5	1.5 to 3.0	3.0 to 4.0
Early postemergence	1.0 to 1.5	1.0 to 2.0	1.0 to 2.0

¹ Refer to container label for definition of soil-texture groups.

Application Timing

Zidua may be applied in a single application or in sequential applications.

Fall/Winter Application for controlling weeds germinating in the fall, or winter annual weeds.

Zidua may be broadcast surface applied in the fall or winter to control winter annual weeds and other weeds germinating in the fall. Use on coarse, medium, or fine soils at rates listed in **Table 1** for preplant surface timing.

Preplant Surface Application (15 to 45 days before planting)

Application rates in **Table 1** should be used when making preplant surface applications, using the highest application rate within the rate range for a given soil texture. Preplant surface applications are not recommended on coarse soils or in areas where average annual rainfall (or rainfall plus irrigation) typically exceeds 40 inches. Cultivation or a labeled postemergence herbicide application may be required for complete weed control.

Preplant Surface Application (up to 14 days before planting)

Apply **Zidua** at the use rates specified in **Table 1** as a broadcast spray to the soil surface up to 14 days before planting on all soil types. Utilize a tank mix with an effective labeled burndown herbicide to control emerged weeds.

Preemergence Surface Application

Apply **Zidua** at use rates specified in **Table 1** as a broadcast spray to the soil surface after planting and before crop emergence. Apply **Zidua** only to a uniform seedbed which is firm and free of clods, cracks, excess

trash (previous crop residue), and weed growth. The seedbed **MUST** be prepared to ensure good seed row closure and soil coverage of the seed. Utilize a tank mix with an effective labeled burndown herbicide to control emerged weeds.

Early Postemergence Application

Apply **Zidua** at use rates specified in **Table 1** as a broadcast spray to sunflower from first true leaf (leaf at least 1.5 inches long, V1 stage) through eight leaf stage (V8). **Zidua** will provide preemergence residual control of weeds germinating after application. Weeds that are already emerged at the time of application must be controlled with cultivation, or tank mix or sequential application of another herbicide labeled for postemergence control of the target weeds in the crop. **Zidua** applications to emerged sunflower may result in temporary leaf burn and stunting, but a reduction in sunflower yield is unexpected.

Adjuvants may be applied with **Zidua** when making early postemergence applications.

Sequential Applications

If a sequential application program of **Zidua** is used (e.g. fall application followed by spring application, or sequential spring applications such as preplant surface or preemergence application followed by postemergence application or consecutive postemergence applications), the maximum combined rate of **Zidua** that may be applied in a cropping season (per year) is 1.5 ozs/A on coarse soils and 5.0 ozs/A on medium-to-fine soils. Separate sequential applications by at least 14 days.

Crop-specific Restrictions

- In a single application, **DO NOT** apply more than the **Zidua** use rate specified for the application timing by soil texture (as specified in **Table 1**).
- **On coarse soil - DO NOT** apply more than a maximum cumulative amount of 1.5 ozs/A of **Zidua** (0.08 lb ai/A of pyroxasulfone) per cropping season (per year).
- **On all soils other than coarse - DO NOT** apply more than a maximum cumulative amount of 5.0 ozs/A of **Zidua** (0.266 lb ai/A of pyroxasulfone) per cropping season (per year).
- **DO NOT** apply **Zidua** preplant incorporated to sunflower.
- **DO NOT** apply **Zidua** to sunflower at cracking or cotyledon stage.
- **DO NOT** apply a tank mix of **Zidua** and **Beyond® herbicide** on **Clearfield®** sunflower hybrids/varieties.

- There is no required (preharvest) interval between a preplant and preemergence application of **Zidua® herbicide** and sunflower harvest.
- **DO NOT** apply **Zidua** postemergence less than 60 days before harvest of sunflower seed.

Crop-specific Precautions

- **Sunflower seed quality** - Plant high quality seed.
- **Seedbed preparation** - The seedbed **MUST** be prepared to ensure good seed row closure and soil coverage of the seed.
- The use of **Zidua** may result in temporary growth suppression or leaf burn in sunflower under stressful conditions such as inadequate or excessive soil moisture or rainfall, cool and hot temperatures, compacted or crusted soils, improper planting depth, injury from other pesticides, disease or other pest damage, mechanical injury, nutrient imbalances, or other conditions known to cause plant stress.

Tank Mixes

It is the pesticide user's responsibility to ensure that all products are registered for the intended use. Read and follow the applicable restrictions and limitations and directions for use on all product labels involved in tank mixing. Users must follow the most restrictive directions for use and precautionary statements of each product in the tank mixture.

Zidua may be tank mixed or applied sequentially with one or more of, but not limited to, the following herbicide products for a broader spectrum of control and/or control of emerged weeds. Refer to the tank mix product labels to confirm that the respective tank mix products are registered for use on peanut. Follow the adjuvant recommendation for the tank mix partner of **Zidua**.

- **Beyond® herbicide** (for use only on **Clearfield® Plus** sunflower hybrids/varieties)
- **Poast® herbicide**
- **Prowl® H₂O herbicide**
- glyphosate (only with **Zidua** during preplant or preemergence applications)

If **Zidua** is tank mixed with another herbicide other than glyphosate or a graminicide, use a lower rate within the **Zidua** rate range for the application timing and soil texture (as specified in **Table 1**).

Zidua may be tank mixed or applied sequentially with fungicide or insecticide products.

Conditions of Sale and Warranty

The **Directions For Use** of this product reflect the opinion of experts based on field use and tests. The directions are believed to be reliable and must be followed carefully. However, it is impossible to eliminate all risks inherently associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or use of the product in a manner inconsistent with its labeling, all of which are beyond the control of BASF CORPORATION ("BASF") or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by the Buyer.

BASF warrants that this product conforms to the chemical description on the label and is reasonably fit for the purposes referred to in the **Directions For Use**, subject to the inherent risks, referred to above.

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