



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY  
AND POLLUTION PREVENTION

December 18, 2014

Ms. Linda Obrestad  
Regulatory Analyst  
Valent U.S.A. Corporation  
1600 Riviera Ave., Suite 200  
Walnut Creek, CA 94596-8025

Subject: Label Notification per PRN 98-10 – Adding a Marketing Logo  
Product Name: V-10089 WDG (Herbicide)  
EPA Registration Number: 59639-117  
Application Date: November 17, 2014  
Decision Number: 497518

Dear Ms. Obrestad:

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The label submitted with the application has been stamped “Notification” and will be placed in our records.

If you have any questions, you may contact BeWanda B Alexander at (703)305-7460 or via email at [alexander.bewanda@epa.gov](mailto:alexander.bewanda@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Shaja Joyner".

Shaja Joyner, Product Manager 20  
Fungicide and Herbicide Branch  
Registration Division (7505P)  
Office of Pesticide Programs

**NOTIFICATION**

59639-117

The applicant has certified that no changes, other than those reported to the Agency have been made to the labeling. The Agency acknowledges this notification by letter dated:

12/18/2014



<b>GROUP</b>	<b>2+14</b>	<b>HERBICIDE</b>
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**NOTIFICATION**

[Bracketed information is optional text].  
[Roundup Ready PLUS® Crop Management Solutions]

# V-10089 WDG

(HERBICIDE)

FOR WEED CONTROL IN SOYBEANS

Active Ingredient	By Wt.
<sup>1</sup> Flumioxazin.....	30.0%
<sup>2</sup> Chlorimuron Ethyl .....	10.3%
Other Ingredients .....	<u>59.7%</u>
Total .....	100.0%

<sup>1</sup>2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1H-isoindole-1,3(2H)-dione

<sup>2</sup>Ethyl 2-[[[(4-chloro-6-methylpyrimidin-2-yl)amino;]carbonyl;]amino;]sulfonyl;]benzoate

V-10089 WDG is a water dispersible granule containing 40.3% active ingredient.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.**

**NET WEIGHT 5 POUNDS**

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS & DOMESTIC ANIMALS CAUTION

Harmful if inhaled, swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid breathing dust and spray mist. Avoid contact with skin, eyes or clothing.

### FIRST AID

- |                                |  |
|--------------------------------|--|
| <b>If inhaled:</b>             | <ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>  |
| <b>If swallowed:</b>           | <ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to by a poison control center or doctor.</li><li>• Do not give anything by mouth to any unconscious person.</li></ul> |
| <b>If on skin or clothing:</b> | <ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>  |
| <b>If in eyes:</b>             | <ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>  |

### HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **800-892-0099** for emergency medical treatment information.

### PERSONAL PROTECTIVE EQUIPMENT (PPE):

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:** long sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride, socks and shoes.

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

### USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- 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.

**ENVIRONMENTAL HAZARDS:**

This product is toxic to non-target plants and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to non-target plants and aquatic organisms in neighboring areas. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water when disposing of equipment washwaters.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

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 State or Tribe, consult the agency responsible for pesticide regulation.

**AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

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

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is: coveralls, chemical-resistant gloves made of any waterproof material, shoes plus socks.

**DISCLAIMER, RISKS OF USING THIS PRODUCT,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT: Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.**

**RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE FULLEST EXTENT ALLOWED BY LAW, AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. Buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

**To the fullest extent allowed by law, Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE FULLEST EXTENT ALLOWED BY LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

**PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements, Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is latter, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer, Risks of Using This Product, Limited Warranty and Limitation of Liability**, which may not be modified by any oral or written agreement.

**TANK MIXES**

**NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, to the extent allowed by applicable law.**

Read and follow the entire label of each product to be used in the tank mix with this product.

## RESISTANCE MANAGEMENT

V-10089 WDG is a Group 2 and a Group 14 herbicide. Any weed population may contain or develop plants naturally resistant to V-10089 WDG and other Group 2 and Group 14 herbicides. Weed species with acquired resistance to Group 2 and Group 14 herbicides may eventually dominate the weed population if Group 2 and Group 14 herbicides are used repeatedly in the same field or in successive years as the primary method of control for targeted species. This may result in partial or total loss of control of those species by V-10089 WDG or other Group 2 and Group 14 herbicides.

To delay herbicide resistance consider:

- Avoiding the consecutive use of V-10089 WDG or other target site of action Group 2 and Group 14 herbicides that have a similar target site of action, on the same weed species.
- Using tank mixtures or premixes with herbicides from different target site of action Groups as long as the involved products are all registered for the same use, have different sites of action, and are both effective at the tank mix or prepack rate on the weed(s) of concern.
- Basing herbicide use on a comprehensive Integrated Pest Management (IPM) program.
- Monitoring treated weed populations for loss of field efficacy.
- Contacting your local extension specialist, certified crop advisors, and/or manufacturer for herbicide resistance management and/or integrated weed management recommendations for specific crops and resistant weed biotypes.
- For further information or to report suspected resistance, you may contact Valent U.S.A. Corporation at 800-682-5368 or [www.valent.com](http://www.valent.com).

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## PRODUCT INFORMATION

V-10089 WDG is a selective herbicide for preemergence control of susceptible broadleaf weeds and suppression of certain annual grasses in soybeans. V-10089 WDG also offers control of certain emerged broadleaf weeds when applied as part of a burndown treatment.

V-10089 WDG has two modes of action and rapidly inhibits the growth of susceptible weed species. Following application, susceptible weed species may germinate and emerge. Seedling weeds will then either turn brown and die shortly after being exposed to light, or will cease growing, turn yellow and then turn brown from the growing point out. Susceptible species usually do not grow past the cotyledon stage before they die from either mode of action. Less susceptible species may remain green, but will be stunted and non-competitive.

## RESTRICTIONS AND LIMITATIONS

- Do not apply this product when weather conditions favor spray drift from treated areas.
- Do not make more than one application of V-10089 WDG per growing season.
- Do not apply more than 5 oz of V-10089 WDG per acre during a single growing season.
- Do not graze treated fields or feed treated forage or hay to livestock.
- Do not apply this product through any type of irrigation system.
- Do not use on soils with a composite pH of greater than 7.6.
- Do not tank mix V-10089 WDG with chloroacetamide-containing products such as: fluthiamide (Axiom<sup>®</sup>), s-metolachlor (Dual<sup>®</sup> II Magnum); dimethenamid (Frontier<sup>®</sup>), dimethenamid-P (Outlook<sup>®</sup>) or alachlor (IntRRo<sup>®</sup>), unless directed by state 2(ee) or 24c labeling.
- Do not apply V-10089 WDG within 14 days before or after an application of an organophosphate insecticide on any soybean variety that is not Dupont™ STS<sup>®</sup> or STS/RR, as severe crop injury may occur.
- Prior to the emergence of any STS or STS/RR soybean variety, V-10089 WDG can be applied in a tank mixture with an organophosphate insecticide or applied following the application of an organophosphate insecticide.
- When applying by air, observe drift management restrictions and precautions listed under “**AERIAL APPLICATION**”.

## ENVIRONMENTAL CONDITIONS AND BIOLOGICAL PERFORMANCE

### Preemergence Application

**Important:** Crop injury may occur from applications made to poorly drained soils under cool, wet conditions. Risk of crop injury can be minimized by not using on poorly drained soils, planting at least 1.5 inches deep and completely covering seeds with soil prior to preemergence applications.

Moisture is necessary to activate V-10089 WDG Herbicide in soil for residual weed control. Dry weather following applications of V-10089 WDG may reduce effectiveness. However, when adequate moisture is received after dry conditions, V-10089 WDG will control susceptible germinating weeds.

When adequate moisture is not received after soil-applied treatments of V-10089 WDG, weed control may be improved by utilizing shallow cultivation. If weeds begin to emerge, irrigate (1/4 inch of water) or cultivate uniformly with shallow-tillage equipment, such as a rotary hoe, that will not damage the crop. Deep cultivation reduces the effectiveness of V-10089 WDG and should be avoided.

### Burndown Application

For best results, V-10089 WDG should be applied to actively growing plants. Applying V-10089 WDG under conditions that do not promote active weed growth will reduce herbicide effectiveness. Do not apply V-10089 WDG when weeds are under stress due to drought, excessive water, extremes in temperature, disease or low humidity. Weeds under stress tend to become less susceptible to herbicidal action. V-10089 WDG is most effective when applied under sunny conditions at temperatures above 65°F.

V-10089 WDG is rainfast 1 hour after application. Applications should not be made if rain is expected within 1 hour of application or efficacy may be reduced.



### **Timing to Soybeans**

V-10089 WDG may be applied up to 3 days after planting but before soybean emergence. Application after the soybeans emerge will result in severe crop injury. Select V-10089 WDG rate from Tables 1 or 2, according to anticipated weed spectrum.

### **Soil Characteristics**

Application of V-10089 WDG to soils with high organic matter and/or high clay content may require a higher rate than soils with low organic matter and/or low clay content. Application to cloddy seedbeds can result in reduced weed control.

### **Herbicide Rate**

V-10089 WDG rate for preemergence application, as well as when used as part of a burndown program, should be based upon soil characteristics and the most difficult-to-control weed species being targeted for preemergence control. Select the proper V-10089 WDG rate from Table 1. Table 2 list weeds that are suppressed by V-10089 WDG.

**CARRIER VOLUME AND SPRAY PRESSURE** (Ground Equipment only. See Information for Aerial Equipment under "AERIAL APPLICATION".)

### **Preemergence Application**

To ensure uniform coverage, use 10 to 30 gals of spray solution per acre for conventional tillage application. Nozzle selection should meet manufacturer's gallonage and pressure recommendation for preemergence herbicide application.

### **Burndown Application**

To ensure thorough coverage in burndown applications, use 15 to 30 gals of spray solution per acre. Use 20 to 30 gals per acre if dense vegetation or heavy crop residue is present. Nozzle selection should meet manufacturer's gallonage and pressure recommendations for postemergence herbicide application.

### **Adjuvant Requirements for Burndown**

Burndown control of weeds from V-10089 WDG requires the addition of an agronomically approved adjuvant to the spray mixture. A crop oil concentrate (COC), which contains at least 15% emulsifiers and 80% oil, may be used when applying V-10089 WDG as part of a burndown program. Certain tank mixes and/or use patterns may require the use of a non-ionic surfactant (NIS) in place of a COC. The NIS must contain at least 80% active ingredient. Also, spray grade ammonium sulfate (AMS) may be added to the spray mixture along with either a COC or NIS to enhance weed control. The addition of AMS does not replace the need for COC or NIS. Mixing compatibility qualities should be verified by a jar test.

### **Adjuvant Rates for Burndown**

COC at 1 to 2 pts/A or NIS at 0.25% v/v. The addition of spray grade AMS at 8.5 to 17 lbs per 100 gals of spray solution maybe added in addition to the COC or NIS.

### **JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND V-10089 WDG HERBICIDE**

When using V-10089 WDG and an adjuvant, such as in stale seed bed or reduced tillage situations, a jar test should be performed before mixing commercial quantities of V-10089 WDG, when using V-10089 WDG for the first time, when using new adjuvants or when a new water source is being used.

1. Add 1 pt of the water to a quart jar. The water should be from the same source and temperature that will be used in the spray tank mixing operation.
2. Add 2 gms of V-10089 WDG to the quart jar, gently mix until product dissolves.
3. Add 60 ml (4 tbsp or 2 fl oz) of the COC to the quart jar, gently mix. If a NIS is being used in a tank mix, add 2.5 ml (1/2 tsp) of the NIS in place of the COC.
4. If AMS is being used, add 19 gms to the quart jar.
5. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
6. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed the choice of adjuvant should be questioned:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: Thickening texture (coagulated) like gelatin.

## **SPRAYER PREPARATION AND CLEANUP**

Before applying *V-10089* WDG, start with clean, well maintained application equipment. The spray tank, as well as all hoses and booms, should be cleaned to ensure no residues from the previous spraying operation remain in the sprayer. Some pesticides, including the sulfonylurea and phenoxy herbicides, are active at very small amounts and can cause crop injury when applied to susceptible crops. The spray equipment should be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply *V-10089* WDG.

Spray equipment, including mixing vessels and nurse tanks, must be cleaned each day following *V-10089* WDG application. After *V-10089* WDG is applied, the following steps should be used to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Top off tank, add 1 gal of 3% household ammonia (or equivalent) for every 100 gals of water, circulate through sprayer for 5 minutes and then flush all hoses, booms, screens and nozzles for a minimum of 15 minutes. If diaphragms are being used on the spray boom, loosen diaphragms before flushing the spray system, allowing cleaning solution to spray through the open diaphragm. If spray lines have any end caps, they must be loosened before flushing the system, allowing cleaning solution to spray through the loosened caps. To enhance removal of *V-10089* WDG from the spray system, add a tank cleaner such as Valent Tank Cleaner, in place of ammonia and allow the cleaning solution to remain in the pressurized spray system (spray tank, hoses and boom) for overnight before flushing the system for a minimum of 15 minutes.
4. Drain tank completely.
5. Add enough clean water to the spray tank to allow all hoses, booms, screens and nozzles to be flushed for 2 minutes.
6. Remove all nozzles and screens and rinse them in clean water.

Spray equipment, including all tanks, hoses, booms, screens and nozzles, should be thoroughly cleaned before it is used to apply postemergence pesticides. Equipment with *V-10089* WDG residue remaining in the system may result in crop injury to the subsequently treated crop.

## **MIXING INSTRUCTIONS**

1. Fill clean spray tank 1/3 to 1/2 of desired level with clean water.
2. While agitating, add the required amount of *V-10089* WDG. Agitation should create a rippling or rolling action on the water surface. If tank mixing *V-10089* WDG with other labeled herbicides, add water soluble bags first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. Prepare no more spray mixture than is required for the immediate spray operation.
3. Add any required adjuvants.
4. Fill spray tank to desired level with water. Agitation should continue until spray solution has been applied.
5. Mix only the amount of spray solution that can be applied the day of mixing. *V-10089* WDG should be applied within 6 hours of mixing.

## **APPLICATION EQUIPMENT**

Application equipment should be clean and in good repair. Nozzles should be uniformly spaced on boom and frequently checked for accuracy.

### **BROADCAST APPLICATION**

Apply *V-10089* WDG, and *V-10089* WDG tank mixes, with ground equipment using standard commercial sprayers equipped with flat fan or flood nozzles (preemergence applications only) designed to deliver the desired spray pressure and spray volume.

### **BAND APPLICATION**

When banding, use proportionately less water and *V-10089* WDG per acre.

### **AERIAL APPLICATION**

Spray drift away from the site of application may cause damage to non-target vegetation. To minimize drift, apply the largest droplet size consistent with uniform coverage and satisfactory weed control. To obtain satisfactory application and avoid drift, the following directions must be observed:

- Do not apply during low-level inversion conditions, when winds are gusty or under other conditions that favor drift. Do not spray when wind velocity is less than 2 mph or more than 10 mph.
- Do not apply this product by air within 40 ft of non-target plants including non-target crops.
- Do not apply this product by air within 100 ft of emerged cotton crops.
- Do not apply this product by air within 40 ft of streams, wetlands, marshes, ponds, lakes and reservoirs.

**Carrier Volume and Spray Pressure:** When used as part of a burndown weed control program, apply *V-10089* WDG in 7 to 10 gals of water per acre. Application at less than 7 gals per acre may provide inadequate control. When used for preemergence weed control, apply *V-10089* WDG in 5 to 10 gals of water per acre. The higher gallonage applications generally afford more consistent weed control. Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.

**Nozzle Selection and Orientation:** Formation of very small drops may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray pressure. Use nozzles that produce flat or hollow cone spray patterns. Use non-drip type nozzles, such as diaphragm type nozzles, to avoid unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

**Adjuvants and Drift Control Additives:** Refer to tank mix partner's label for adjuvant recommendation. Drift control additives may be used. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label.

### **CROP FAILURE**

If the crop treated with *V-10089* WDG is lost due to a catastrophe, such as hail or other forms of inclement weather, soybeans can be replanted immediately.

### **ROTATIONAL RESTRICTIONS**

Prior to using *V-10089* WDG, consideration should be given to crop rotation plans. Crops other than soybeans may be extremely sensitive to low concentrations of *V-10089* WDG remaining in the soil the next planting season. Choice of rotational crop is restricted following application of *V-10089* WDG.

The following rotational crops may be planted after applying *V-10089* WDG at the recommended rate. Planting earlier than the recommended rotational interval may result in crop injury.

V-10089 WDG Crop Rotational Interval in Months			
Crop	Southern Region <sup>1</sup>		Midwest Region <sup>2</sup>
	Soil pH less than 7.0	Soil pH 7.0 or greater	All Soil pH
Soybean	Immediately	Immediately	Immediately
Barley, Ryegrass, Wheat, Winter Rye	4	4	4
Field Corn <sup>3</sup>	10	18	10
Cotton	10	30	10
Rice	9	18	10
Tobacco (Transplant)	10	18	10
Tomato (Transplant)	12	18	12
Alfalfa	12	18	12
Clover	12	18	18
Dry Bean, Kidney Bean, Pea, Snap Bean	12	30	12
Sorghum	10	18	10
Cabbage, Cucumbers, Flax, Lentils, Mustards, Peanuts, Pumpkin, Sunflower, Sweet Corn, Watermelon	18	30	18
Canola (Rapeseed), Carrot, Onion, Potato, Sugar Beet and any other crops not listed	18	30	30

<sup>1</sup>Southern Region includes the states of AL, AR, DE, FL, GA, KY, LA, MD, MO bootheel, MS, NC, NJ, SC, TN, TX, VA and WV.

<sup>2</sup>Midwest Region includes the states of IA (except Hamburg-Ida-Monona, Nicolett-Clarion and Webster soils), IL, IN, KS, MI, MO (except bootheel), NE (fields south of Route 30 and east of Route 281), NY, OH, OK, PA and WI (South of Interstate 90 between Lacrosse and Madison and South of Interstate 94 between Madison and Milwaukee).

<sup>3</sup>Field corn is defined to include only that corn grown for grain or silage, popcorn and seed corn. However, because seed corn inbred lines may vary in their sensitivity to trace amounts of herbicide carryover, Valent cannot warrant that seed corn can be re-cropped without damage or yield loss. User should seek the advice of their seed corn company agronomist regarding inbred sensitivity to herbicides prior to planting any inbred lines.

#### **ADDITIONAL PREEMERGENCE BROADLEAF CONTROL**

V-10089 WDG can be tank mixed with metribuzin, linuron or pendimethalin for additional weed control.

#### **ADDITIONAL PREEMERGENCE GRASS CONTROL**

V-10089 WDG can be tank mixed with pendimethalin or Command<sup>®</sup> for additional grass control. Tank mixes with chloroacetamide containing products such as: fluthiamide (Axiom), s-metolachlor (Dual II Magnum), dimethenamid (Frontier), dimethenamid-P (Outlook) or alachlor (IntRRo), may result in severe injury to soybeans when application is followed by prolonged periods of cool wet weather and should not be used with V-10089 WDG, unless directed by state 2(ee) or 24(c) labeling.

Read tank mix product label for rates and weeds controlled. Always read and follow label directions for all tank mix products before using. The most restrictive labeling of any tank mix product must be followed. V-10089 WDG, when applied according to label use directions, will control the weeds listed in Table 1 and suppress the weeds listed in Table 2. This label makes no claims concerning control of other weed species.

**Table 1. Broadleaf Weeds Controlled by Preemergence Application of V-10089 WDG**

<b>BROADLEAF WEED SPECIES</b>				
<b>SECTION A</b>				
<b>COMMON NAME</b>	<b>SCIENTIFIC NAME</b>	<b>ORGANIC MATTER</b>	<b>SOIL TYPE</b>	<b>V-10089 WDG RATES</b>
Bittercress, Hairy	<i>Cardamine hirsuta</i>	0.5 to 5%	All Soil Types	3.0 oz/A
Carpetweed	<i>Mollugo verticillata</i>			
Chamomile				
German	<i>Matricaria recutita</i>			
Mayweed	<i>Anthemis cotula</i>			
Chickweed				
Common	<i>Stellaria media</i>			
Mouseear	<i>Cerastium vulgatum</i>			
Common Lambsquarters	<i>Chenopodium album</i>			
Common Purslane	<i>Portulaca oleracea</i>			
Copperleaf				
Hophornbeam	<i>Acalypha ostryifolia</i>			
Virginia	<i>Acalypha virginica</i>			
Dandelion	<i>Taraxacum officinale</i>			
Eclipta	<i>Eclipta prostrata</i>			
Eveningprimrose, Cutleaf	<i>Oenothera laciniata</i>			
Florida Pusley	<i>Richardia scabra</i>			
Hairy Indigo	<i>Indigofera hirsuta</i>			
Henbit	<i>Lamium amplexicaule</i>			
Kochia	<i>Kochia scoparia</i>			
Little Mallow	<i>Malva parviflora</i>			
Marestail/Horseweed	<i>Conyza canadensis</i>			
Mayweed	<i>Matricaria recutita</i>			
Mustard, Wild	<i>Brassica kaber</i>			
Nightshades				
Black	<i>Solanum nigrum</i>			
Eastern Black	<i>Solanum ptycanthum</i>			
Hairy	<i>Solanum sarrachoides</i>			
Pigweeds				
Redroot	<i>Amaranthus retroflexus</i>			
Smooth	<i>Amaranthus hybridus</i>			
Spiny Amaranth	<i>Amaranthus spinosus</i>			
Tumble	<i>Amaranthus albus</i>			
Prickly Sida (Teaweed)	<i>Sida spinosa</i>			
Puncturevine	<i>Tribulus terrestris</i>			
Purple Deadnettle	<i>Lamium purpureum</i>			
Redmaids	<i>Calandrinia ciliata</i> var. <i>menziesii</i>			
Shepherd's-purse	<i>Capsella bursa-pastoris</i>			
Smallflower Morningglory	<i>Jacquemontia tamnifolia</i>			
Spotted Spurge	<i>Euphorbia maculata</i>			
Swinecress	<i>Coronopus didymus</i>			
Venice Mallow	<i>Hibiscus trionum</i>			

continued





## MIDWEST REGION STATES SPECIFIC USE DIRECTIONS

**V-10089 WDG MAY BE USED IN THE FOLLOWING MIDWESTERN STATES: IA (except Hamburg-Ida-Monona, Nicolett-Clarion and Webster soils), IL, IN, KS, MI, MO (except bootheel), NE (fields South of Route 30 and East of Route 281), NY, OH, OK, PA and WI (South of Interstate 90 between Lacrosse and Madison and South of Interstate 94 between Madison and Milwaukee).**

### Restrictions and Limitations

- On soils with a composite pH of 7 or less apply 2.5 to 5.0 oz/A.
- On soils with a composite pH greater than 7, do not apply more than 2.5 oz/A of V-10089 WDG. V-10089 WDG at 2.5 oz/A will provide suppression of the weeds listed in Table 1.
- Do not apply additional chlorimuron-ethyl-containing herbicides to fields treated with V-10089 WDG.
- Do not apply to soils with a history of nutrient deficiency, such as iron chlorosis, as injury may occur.

### SPRING BURNDOWN PROGRAM FOR MIDWEST REGION STATES

#### Restrictions and Limitations

- Do not perform any tillage operation after application or residual weed control will be reduced.

#### Timing To Weeds

V-10089 WDG, applied as part of a spring burndown program for midwest region states, may be used for preemergence weed control, as well as to assist in burndown of many annual and perennial weeds where soybeans will be planted. For control of emerged weeds, choose the most appropriate burndown tank mix partner from Table 3. For each V-10089 WDG tank mix partner listed, refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back intervals and adjuvant recommendations.

**Table 3. Tank Mix Partners for Control of Emerged Weeds in Spring Burndown Program for Midwest Region States**

Tank Mix Partners	Target Weeds <sup>1</sup>
2,4-D LVE	Dandelion Giant Ragweed Marestail/Horseweed
Express <sup>®</sup> XP + 2,4-D LVE	Chickweed Species
glyphosate	General Burndown
glyphosate + 2,4-D LVE	General Burndown
Harmony <sup>®</sup> GT XP	Lambsquarter
paraquat	Chickweed Henbit Marestail/Horseweed

<sup>1</sup>Refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back planting intervals and adjuvant recommendations.

### FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS FOR MIDWEST REGION STATES

#### Restrictions and Limitations

- Do not apply to frozen or snow covered soil.
- Do not perform any tillage operation after application or residual weed control will be reduced.
- Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

#### Timing To Weeds

V-10089 WDG, at 3.0 to 5.0 oz/A, can be used in the fall to provide residual weed control in fields that will be planted the following spring with soybeans. If weeds have emerged at the time of application, use V-10089 WDG in combination with a labeled burndown herbicide (Table 4). Application must be made no earlier than October 15 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual

weed control into the spring (May 1) or up until planting, whichever comes first. Weeds controlled by residual activity are listed in Table 1. For each V-10089 WDG tank mix partner listed, refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back intervals and adjuvant recommendations.

**Table 4. Tank Mix Partners for Control of Emerged Weeds in Fall Burndown and Fallow Seedbed Programs for Midwest Region States**

<b>Tank Mix Partners</b>	<b>Target Weeds<sup>1</sup></b>
2,4-D LVE	Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
2,4-D LVE + dicamba	Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
Express XP + 2,4-D LVE	Chickweed Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
glyphosate	Annual Grasses Chickweed Cressleaf Groundsel Henbit Purple Deadnettle Shepherd's-purse
glyphosate + 2,4-D LVE	Annual Grasses Chickweed Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse

<sup>1</sup>Refer to tank mix product labels for specific recommendations for control of emerged weeds present, rotational restrictions, planting intervals and adjuvant recommendations.



## SOUTHERN REGION STATES SPECIFIC USE DIRECTIONS

**V-10089 WDG MAYBE BE USED IN THE FOLLOWING SOUTHERN REGION STATES OF: AL, AR, DE, FL, GA, KY, LA, MD, MO (bootheel), MS, NC, NJ, SC, TN, TX, VA and WV.**

### Restrictions and Limitations

- On soils with a composite pH of 7 or less apply 4.0 to 5.0 oz/A of V-10089 WDG.
- On soils with a composite pH of greater than 7, do not apply more than 4.0 oz/A of V-10089 WDG
- Do not apply additional chlorimuron-ethyl-containing herbicides to fields treated with V-10089 WDG at 3.0 oz/A, that have a soil pH of 7.0 or greater, except in the states of AL, AR, FL, GA, KY, LA, MS, MO (bootheel), NC, SC, TN and TX, where up to 0.5 oz/A of Classic® may be applied.
- Do not apply to Black Belt soils in Alabama and Mississippi with a soil pH greater than 7.0 or a history of nutrient deficiency such as iron chlorosis, as injury may occur.

### SPRING BURNDOWN PROGRAM FOR SOUTHERN REGION STATES

#### Restrictions and Limitations

- Do not perform any tillage operation after application or residual weed control will be reduced.

#### Timing To Weeds

V-10089 WDG, applied as part of a spring burndown program for southern region states, may be used for preemergence weed control, as well as to assist in burndown of many annual and perennial weeds where soybeans will be planted. For control of emerged weeds, choose the most appropriate burndown tank mix partner from Table 5. For each V-10089 WDG tank mix partner listed, refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back intervals and adjuvant recommendations.

**Table 5. Tank Mix Partners for Control of Emerged Weeds in Spring Burndown Program for Southern Region States**

Tank Mix Partner	Target Weeds <sup>1</sup>
2,4-D LVE	Dandelion Giant Ragweed Marestail/Horseweed
dicamba	Marestail/Horseweed
Express XP + 2,4-D LVE	Chickweed species
glyphosate	General Burndown
glyphosate + 2,4-D LVE	General Burndown
Harmony GT XP	Lambsquarters
paraquat	Chickweed Henbit

<sup>1</sup> Refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back planting intervals and adjuvant recommendations.

### FALL BURNDOWN AND FALLOW SEEDBED PROGRAMS FOR SOUTHERN REGION STATES

#### Restrictions And Limitations

- Do not apply to frozen or snow covered soil.
- Do not perform any tillage operation after application or residual weed control will be reduced.
- Abnormally warm or wet winters will reduce the length of weed control observed in the spring.

#### Timing To Weeds

V-10089 WDG, at 3.0 to 5.0 oz/A, can be used in the fall to provide residual weed control in fields that will be planted the following spring with soybeans. If weeds have emerged at the time of application, use V-10089 WDG in combination with a labeled burndown herbicide (Table 6). Application must be made no earlier than November 15 or when soil temperature falls below 50°F at a 2 inch depth to maintain residual weed control into the spring (April 1) or up until planting, whichever comes first. Weeds controlled by

residual activity are listed in Table 1. For each V-10089 WDG tank mix partner listed, refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, plant-back intervals and adjuvant recommendations.

**Table 6. Tank Mix Partners for Control of Emerged Weeds in Fall Burndown and Fallow Seedbed Programs for Southern Region States**

<b>Tank Mix Partner</b>	<b>Target Weeds<sup>†</sup></b>
2,4-D LVE	Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
2,4-D LVE + dicamba	Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
dicamba	Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse
glyphosate	Annual Grasses Chickweed Cressleaf Groundsel Henbit Purple Deadnettle Shepherd's-purse
glyphosate + 2,4-D LVE	Annual Grasses Chickweed Cressleaf Groundsel Dandelion Henbit Marestail/Horseweed Purple Deadnettle Shepherd's-purse

<sup>†</sup>Refer to tank mix product label(s) for specific recommendations for control of emerged weeds present, rotational restrictions, planting intervals and adjuvant recommendations.

## STORAGE AND DISPOSAL

### PESTICIDE STORAGE

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

Keep pesticide in original container.

Store in a cool, dry, secure place.

Do not put formulation or dilute spray solution into food or drink containers.

Do not contaminate food or foodstuffs.

Do not store or transport near feed or food.

Not for use or storage in or around the home.

For help with any spill, leak, fire or exposure involving this material, call day or night (800) 892-0099.

### PESTICIDE DISPOSAL

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

### CONTAINER DISPOSAL

Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

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