

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

July 17, 2020

Keeva Shultz Sharda USA LLC c/o Wagner Regulatory Associates, Inc. P.O. Box 640 Hockessin, DE 19707

Subject: Registration Review Label Mitigation for Chlorimuron Product Name: SHARDA CHLORIMURON + METRIBUZIN WDG EPA Registration Number: 83529-41 Application Date: 12/19/2017 Decision Number: 558356

Dear Ms. Shultz:

The Agency, in accordance with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, has completed reviewing all the information submitted with your application to support the Registration Review of the above referenced product in connection with the Sulfonylurea (SU) Herbicides Interim Decisions, and has concluded that your submission is acceptable. The label referred to above, submitted in connection with registration under FIFRA, as amended, is acceptable.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

A copy of your label stamped "Accepted" is enclosed. Products shipped after 12 months from the date of this amendment must bear the new revised label. Your release for shipment of the product bearing the amended label constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6.

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If you have any questions about this letter, please contact Srijana Shrestha by phone at 703-305-6471, or via email at <u>Shrestha.Srijana@epa.gov</u>.

Sincerely,

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Linda Arrington, Branch Chief Risk Management and Implementation Branch 4 Pesticide Re-Evaluation Division Office of Pesticide Programs

Enclosure

METRIBUZIN	GROUP	5	HERBICIDE
CHLORIMURON	GROUP	2	HERBICIDE

# SHARDA CHLORIMURON + METRIBUZIN WDG ABN: Metrixx Plus

ACTIVE INGREDIENTS:	% BY WT.
Metribuzin*	
4-Amino-6-(1,1-dimethylethyl)-3-(methylthio)-1,2,4-triazin-5(4H)-one	64.30%
Chlorimuron Ethyl*	
Ethyl 2-[[[[(4-chloro-6-methoxypyrimidin-2-yl)amino]carbonyl]amino]sulfonyl]benzoate	
OTHER INGREDIENTS:	<u>25.00%</u>
TOTAL:	100.0%

\*This product contains 0.643 lb. a.i. of metribuzin per pound and 0.107 lb. a.i. of chlorimuron per pound.

# KEEP OUT OF REACH OF CHILDREN CAUTION - PRECAUCIÓN

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

	FIRST AID
If Swallowed:	Call a poison control center or doctor immediately for treatment advice.
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>
	• Do not induce vomiting unless told to do so by a poison control center or doctor.
If On Skin or	• Take off contaminated clothing.
Clothing:	<ul> <li>Rinse skin immediately with plenty of water for 15 to 20 minutes.</li> </ul>
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>
If In Eyes:	<ul> <li>Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.</li> </ul>
	• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
For 24-hour medical emergency assistance (human or animal), call 1-800-222-1222. For chemical emergency	
assistance (spill, leak, fire, or accident), call ChemTrec at <b>1-800-424-9300</b> .	

[Optional referral statements when booklets and container labels are used:

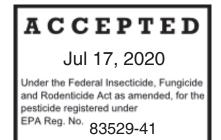
See Panel for First Aid Instructions and booklet for complete Precautionary Statements and Directions For Use. See label booklet for complete Precautionary Statements, Directions For Use, and Storage and Disposal. See label booklet for additional Precautionary Statements, Directions For Use, and Storage and Disposal.

See label booklet for complete Directions For Use.]

EPA Reg. No.: 83529-41 EPA Est. No.: Net Contents:



7217 Lancaster Pike, Suite A Hockessin, Delaware 19707



# **PRECAUTIONARY STATEMENTS**

# HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION.** Harmful if swallowed. Causes moderate eye irritation. Avoid breathing dust, vapor, or spray mist. Avoid contact with skin, eyes, and clothing.

# **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

# Applicators and Other Handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, PVC ≥ 14 mils and viton ≥ 14 mills
- Shoes plus socks

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. 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.

# **ENGINEERING CONTROL STATEMENTS**

When handlers use closed systems, enclosed cabs or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR Part 170 Section 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

**Important:** If a closed system is being used and PPE is reduced, handlers must be provided all PPE specified in the section "**Applicators and Other Handlers**" and have such PPE immediately available for use in an emergency, such as a spill or equipment breakdown.

# Users Should:

# USER SAFETY RECOMMENDATIONS

- Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove clothing/PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

# **ENVIRONMENTAL HAZARDS**

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate. Do not apply where/when conditions favor runoff.

This product contains metribuzin, a chemical that can travel (seep or leach) through soil, and can contaminate groundwater that may be used for drinking water. Metribuzin has been detected in groundwater. **Do not** apply this product where the water table (groundwater) is close to the surface and soils are permeable (well drained, such as loamy sand soil). Contact your local agricultural agency for additional information on soil types in your area.

Chlorimuron-ethyl is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

This product may impact surface water quality due to runoff of rain water. This is especially true for poorly draining soils and soils with shallow ground water. This product is classified as having high potential for reaching surface water via runoff for several months or more after application. A level, well-maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential loading of chlorimuron-ethyl from runoff water and sediment. Runoff of this product will be greatly reduced by avoiding applications when rainfall or irrigation is expected to occur within 48 hours.

WINDBLOWN SOIL PARTICLES: Sharda Chlorimuron + Metribuzin WDG has the potential to move off-site due to wind erosion. Soils that are subject to wind erosion usually have a high silt and/or fine to very fine sand fractions and low organic matter content. Other factors which can affects the movement of windblown soil include the intensity and direction of prevailing winds, vegetative cover, site slope, rainfall, and drainage patterns. Avoid applying Sharda Chlorimuron + Metribuzin WDG if prevailing local conditions may be expected to result in off-site movement.

# **DIRECTIONS FOR USE**

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

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.

# NON-TARGET ORGANISM ADVISORY

This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by minimizing spray drift. For further guidance and instructions on how to minimize spray drift, refer to the **SPRAY DRIFT MANAGEMENT** section of this label.

# 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 instructions and exceptions pertaining to the 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 barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, PVC ≥ 14 mils and viton ≥ 14 mills
- Shoes plus socks

This product is a water dispersible granule herbicide that is mixed with water and sprayed for selective burndown and residual weed control in soybeans. This product provides control of many broadleaf weeds when used at specified label rates, and will provide partial control of annual grasses and nutsedge.

Rainfall or sprinkler irrigation is required to activate this product for residual applications. Weed control and duration of control depends on rate used, weed spectrum, growing conditions at and following treatment, soil pH, soil texture, percent organic matter, amount of moisture and precipitation.

Optimum weed control occurs when this product is applied to moist soil that receives rainfall or irrigation (1") before weed germination. Multiple rainfalls or irrigation of <1/4" each is not as effective as one rainfall/irrigation of 1/2" - 1". If soil is dry, use 1" - 2" moisture pre-emergence to activate this product. If moisture is insufficient to activate this product, rotary hoe or shallowly cultivate after emergence of soybeans while weeds are small enough to be controlled mechanically.

Soybean stunting can occur if excessive rainfall occurs and soybeans haven't germinated. Stunting is more prevalent under poor drainage conditions or when soil is saturated for extended periods of time. Soybeans will rapidly outgrow stunting as soon as favorable growing conditions return.

Seedling disease, nematodes, cold weather, deep planting of more than 2", excessive moisture, high salt concentrations, and drought can weaken soybean seedlings and increase the likelihood of crop injury.

# **BIOLOGICAL ACTIVITY**

This product inhibits the growth of susceptible weeds. After pre-plant incorporation or pre-emergent applications, susceptible weeds may germinate and emerge, but leaves will yellow within 3 - 5 days and weeds stop growing. Death of leaf tissue and growing point will follow in some species while other weed species will remain green but stop growing. After a burndown application weed growth stops and plant tissues yellow/brown. This product will partially control some annual grasses when used pre-plant or pre-emergence, but additional products may be needed for complete control.

# **PRODUCT USE DIRECTIONS**

- Apply this product any time after fall harvest, but prior to soybean emergence.
- Use clean water only to calibrate sprayers. Keep water away from the well site.
- Spray equipment must be checked and calibrated regularly.
- Dilute and agitate excess solution and apply at specified rates and/or uses listed on this label.
- Measure this product accurately.
- Triple-rinse the pesticide container after emptied, and add rinsate to the spray tank.
- **Thoroughly** clean all application equipment immediately after use and prior to spraying crops other than soybeans.
- Review crop rotation plans before applying this product to avoid injury to crops other than soybeans.
- Review the "Rotational Information" sections for your geographical region prior to applying this product.
- **Split applications** (two applications that total the full product application rate) can be made in a soybean cropping cycle.
- Check with the soybean seed company if a soybean variety if suspected of being sensitive to metribuzin prior to application of this product.

# **PRODUCT USE RESTRICTIONS**

- Do not apply this product after soybeans have emerged.
- Do not apply this product through any type of irrigation system.
- Do not mix more product than what is required for the application at hand.
- Do not overfill the spray tank.
- Do not spill excess material onto the soil at any single location in the field and/or mixing/loading station.
- Do not store this product near any well site.
- Do not allow direct or indirect contact of this product to crops or land scheduled to be planted to crops other than soybeans.
- Do not use this product in geographies other than those listed in the "Rotational Information" sections of this label.
- Do not apply this product, or drain or flush equipment near desirable trees and other plants, or onto areas where their roots may extend, or in locations where this product may be washed or moved into contact with their roots.
- Do not use this product on lawns, walks, driveways, tennis courts, or similar areas.
- Do not allow spray to drift to desirable plants.
- Do not contaminate any body of water with this product.
- Do not mix/load, or use within 50 feet of wells, including abandoned wells, drainage wells, and sink holes.
- Do not store this product with other fertilizers, insecticides, fungicides, and seeds.
- Do not graze treated fields or harvest for forage or hay.
- Do not apply this product with low pressure/high volume hand wand equipment.
- Do not make more than one **single application** at the full product application rate in soybeans per acre per year.
- Do not apply more than 12 oz. of product (0.48 lb. a.i. metribuzin and 0.08 lb. a.i. chlorimuron) per acre per year.
- Do not exceed the full specified label rate for any geographical region.
- Do not apply to frozen ground.
- Do not tank mix this product with organophosphate insecticides.
- Do not apply this product within 14 days before or after application of an organophosphate insecticide.
- Kansas/Nebraska state specific restriction: Do not apply in land that has been or will be treated with metsulfuron and/or chlorsulfuron-containing herbicides without observing the rotational crop intervals.
- Do not apply this product to varieties of soybeans that are sensitive to metribuzin.

# WEED RESISTANCE MANAGEMENT

**Sharda Chlorimuron + Metribuzin WDG** contains two active ingredients with two different modes of action. Chlorimuron-ethyl is a chemical classified as a Group 2 herbicide, Acetolactate Synthase (ALS) or Acetohydroxy Acid

Synthase (AHAS) inhibitor and metribuzin is a chemical classified as a Group 5 herbicide, inhibitor of photosynthesis at photosystem II site A. As a mixture herbicide, each listed weed may not be controlled by both mechanisms of action.

Herbicide resistance is defined as the inherited ability of a plant to survive and reproduce following exposure to a dose of herbicide normally lethal to the wild type. In a plant, resistance may be naturally occurring or induced by such techniques as genetic engineering or selection of variants produced by tissue culture or mutagenesis. Any weed population may contain or develop plants that are naturally resistant to **Sharda Chlorimuron + Metribuzin WDG** and other Group 2 or Group 5 herbicides. Weed species with acquired resistance to Group 2 or Group 5 herbicides may eventually dominate the weed population if Group 2 or Group 5 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 **Sharda Chlorimuron + Metribuzin WDG** or other Group 2 or Group 5 herbicides.

Indicators of possible herbicide resistance include: (1) failure to control a weed species normally controlled by the herbicide at the dose applied, especially if control is achieved on adjacent weeds; (2) a spreading patch of non-controlled plants of a particular weed species; (3) surviving plants mixed with controlled individuals of the same species. If resistance is suspected, prevent weed seed production in the affected area by an alternative herbicide from a different group or by a mechanical method such as hoeing or tillage. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed. If a weed pest population continues to progress after treatment with this product, discontinue use of this product, and switch to another management strategy or herbicide with a different mode of action, if available.

To delay herbicide resistance, consider:

- Avoiding the consecutive use of **Sharda Chlorimuron + Metribuzin WDG** or other target site of action Group 2 or Group 5 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.
- Users should scout before and after application. Users should report lack of performance to registrant or their representative.
- Contact your local sales representative, extension agent, or certified crop advisors to find out if suspected resistant weeds to this MOA have been found in your region. If resistant biotypes of target weeds have been reported, use the application rates of this product specified for your local conditions. Tank mix products so that there are multiple effective mechanisms of action for each target weed.

# INTEGRATED PEST MANAGEMENT

This product may be used as part of an Integrated Pest Management (IPM) program that can include biological, cultural, and genetic practices aimed at preventing economic pest damage. IPM principles and practices include field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your State cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop systems in your area.

#### SPRAY DRIFT MANAGEMENT

# **Aerial Applications:**

- Do not release spray at a height greater than 10 ft. above the vegetative canopy, unless a greater application height is necessary for pilot safety.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- The boom length must not exceed 65% of the wingspan for airplanes or 75% of the rotor blade diameter for helicopters.
- Applicators must use ½ swath displacement upwind at the downwind edge of the field.
- Nozzles must be oriented so the spray is directed toward the back of the aircraft.

- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

#### **Ground Boom Applications:**

- Apply with the nozzle height recommended by the manufacturer, but no more than 3 feet above the ground or crop canopy unless making a turf, pasture, or rangeland application, in which case applicators may apply with a nozzle height no more than 4 feet above the ground.
- For applications prior to the emergence of crops and target weeds, applicators are required to use a Coarse or coarser droplet size (ASABE S572.1).
- For all other applications, applicators are required to use a Medium or coarser droplet size (ASABE S572.1).
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

# **Boom-less Ground Applications:**

- Applicators are required to use a Medium or coarser droplet size (ASABE S572.1) for all applications.
- Do not apply when wind speeds exceed 10 miles per hour at the application site.
- Do not apply during temperature inversions.

# SPRAY DRIFT MANAGEMENT ADVISORIES

# **Boom-less Ground Applications:**

• Setting nozzles at the lowest effective height will help to reduce the potential for spray drift.

# Handheld Technology Applications:

• Take precautions to minimize spray drift.

THE APPLICATOR IS RESPONSIBLE FOR AVOIDING OFF-SITE SPRAY DRIFT. BE AWARE OF NEARBY NON-TARGET SITES AND ENVIRONMENTAL CONDITIONS.

# IMPORTANCE OF DROPLET SIZE

An effective way to reduce spray drift is to apply large droplets. Use the largest droplets that provide target pest control. While applying larger droplets will reduce spray drift, the potential for drift will be greater if applications are made improperly or under unfavorable environmental conditions.

# **Controlling Droplet Size – Ground Boom**

- Volume Increasing the spray volume so that larger droplets are produced will reduce spray drift. Use the highest practical spray volume for the application. If a greater spray volume is needed, consider using a nozzle with a higher flow rate.
- **Pressure** Use the lowest spray pressure recommended for the nozzle to produce the target spray volume and droplet size.
- **Spray Nozzle** Use a spray nozzle that is designed for the intended application. Consider using nozzles designed to reduce drift.

# **Controlling Droplet Size – Aircraft**

• Adjust Nozzles - Follow nozzle manufacturers recommendations for setting up nozzles. Generally, to reduce fine droplets, nozzles should be oriented parallel with the airflow in flight.

# **BOOM HEIGHT – Ground Boom**

Use the lowest boom height that is compatible with the spray nozzles that will provide uniform coverage. For ground equipment, the boom should remain level with the crop and have minimal bounce.

# **RELEASE HEIGHT - Aircraft**

Higher release heights increase the potential for spray drift. When applying aerially to crops, do not release spray at a height greater than 10 ft. above the crop canopy, unless a greater application height is necessary for pilot safety.

# SHIELDED SPRAYERS

Shielding the boom or individual nozzles can reduce spray drift. Consider using shielded sprayers. Verify that the shields are not interfering with the uniform deposition of the spray on the target area.

#### **TEMPERATURE AND HUMIDITY**

When making applications in hot and dry conditions, use larger droplets to reduce effects of evaporation.

#### **TEMPERATURE INVERSIONS**

Drift potential is high during a temperature inversion. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. The presence of an inversion can be indicated by ground fog or by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing. Avoid applications during temperature inversions.

#### WIND

Drift potential generally increases with wind speed. AVOID APPLICATIONS DURING GUSTY WIND CONDITIONS. Applicators need to be familiar with local wind patterns and terrain that could affect spray drift.

#### Air Assisted (Air Blast) Field Crop Sprayers

Air assisted field crop sprayers carry droplets to the target via a downward directed air stream. Some may reduce the potential for drift, but if a sprayer is unsuitable for the application and/or set up improperly, high drift potential can result. It is the responsibility of the applicator to determine that a sprayer is suitable for the intended application, is configured properly, and that drift is not occurring. **Note:** Air assisted field sprayers can affect product performance by affecting spray coverage and canopy penetration. Consult the application equipment section of this label to determine if use of an air assisted sprayer is recommended.

GEOGRAPHIC SPECIFIC USE INSTRUCTIONS		
Central Region includes states of:	Central Region Use Instructions	Central Region Use Restrictions
Delaware, Illinois, Indiana, Iowa (fields East of SR 63 or south of I-80), Kansas, Maryland, Michigan, Missouri (except the Bootheel), Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of I-90), Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin (fields south of I-90 between Lacrosse and Madison and fields south of I-94 between Madison and Milwaukee).	Use on fields with composite pH of <pre>&lt;7.0</pre> that may contain isolated patches where pH may exceed 7.0.*	Do not exceed 2.25 oz./Acre <sup>1</sup> on soils with composite pH >7.0. Michigan, New York & Wisconsin: Do not exceed 2.25 oz./Acre on soil with composite pH >7.6. New York & Wisconsin: Do not exceed 2.25 oz./Acre per season. If making sequential applications with this product, do not exceed 0.82 oz. Al/A chlorimuron ethyl in any soybean per acre per year.

#### GEOGRAPHIC SPECIFIC USE INSTRUCTIONS

\*Crop injury can occur if this product is applied at rates exceeding 2.25 oz./Acre on soils with composite pH of 7.0. 12.25 oz. of product/Acre = 0.09 lb. a.i. metribuzin/Acre and 0.015 lb. a.i. chlorimuron/Acre

Southern Region includes states of:	Southern Region Use Instructions	Southern Region Use Restrictions
Alabama (except "Black belt" where soil pH must be <7.0), Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri (Bootheel region only), Mississippi (except "Black belt" where soil pH must be <7.0), North Carolina, Oklahoma, South Carolina, Tennessee, and Texas (fields east of Route 183).	Use on fields with composite pH of <7.0 that may contain isolated patches where pH may exceed 7.0.*	Do not exceed 3.5 oz./Acre <sup>1</sup> on soils with composite pH >7.0. Black belt of Alabama & Mississippi: Do not apply on soil with pH >7.0, or on soils with nutrient deficiencies (i.e., iron chlorosis). Do not use on soils with a calcareous surface layer or pH >7.5. If making sequential applications with this product, do not exceed 1.07 oz. AI/A chlorimuron ethyl in any soybean per acre per year.

\*Crop injury can occur if this product is applied at rates exceeding 2.25 oz./Acre on soils with composite pH of 7.0. <sup>1</sup>3.5 oz. of product/Acre = 0.14 lb. a.i. metribuzin/Acre and 0.023 lb. a.i. chlorimuron/Acre

# **PRODUCT APPLICATION METHODS**

# Apply this product:

- Fall-applied, early pre-plant, pre-plant, pre-emergence (including burndown).
- If pre-plant incorporated, incorporate uniformly at depth of 1 2" in soil prior to planting soybeans.
- This product can be followed by post-emergent application of other herbicides registered for use on soybeans such as glyphosate, Sharda Se-CURE EC, DuPont Synchrony<sup>®</sup> XP, Sharda Shafen-Star, DuPont Assure<sup>®</sup> II, or "Flexstar". See Rate Tables D and F for sequential use rates for this product.

Apply this product to weeds that are young and actively growing. Weed control is reduced when applied to larger weeds or weeds under stress.

When used for burndown, this product is rainfast after 1 hour.

Use a minimum of 15 gallons per acre of this product to ensure thorough weed coverage and optimal control. Increase the gallonage if weeds are small and/or infestation is heavy.

Use spray nozzles and pressure combinations that deliver medium spray droplets as indicated by ASABE standard S-572.1.

# **USE OF SPRAY ADDITIVES**

Applications of this product used for burndown must include a nonionic surfactant or crop oil concentrate. Crop oil concentrate is the required adjuvant system unless tank mixing with a product that precludes use of crop oil concentrates. If other herbicides are tank mixed with this product, select adjuvants that are authorized for use with both products. Adjuvants must contain only EPA-exempt ingredients.

# Crop Oil Concentrate (COC) – Petroleum or Modified Seed Oil (MSO)

Apply at 1% v/v (1 gal./100 gals. spray solution) or 2% under arid conditions. Oil adjuvants must contain at least 80% high quality, petroleum (mineral) or modified vegetable seed oil with at least 15% surfactant emulsifiers.

# Nonionic Surfactants (NIS)

Apply at 0.25% v/v (1 qt./100 gals. spray solution) or 0.5% under arid conditions. Surfactant products must contain at least 60% nonionic surfactant with a hydrophilic/lipophilic balance (HLB) greater than 12.

# **Tank Mixes**

This product can be tank mixed or followed with sequential applications of other products registered for use on soybeans except where noted on this label, and in addition to the tank mix partners and rates specified. Apply this product in tank mix at full or reduced rates of other products registered for use on soybeans provided that:

- The tank mix product is labeled at the same timing, application method, adjuvants, and use restrictions as this product.
- The tank mix is not specifically prohibited on the label of the tank mix product.
- The tank mix combination is compatible as determined by a "jar test" (see "Tank Mix Compatibility Testing" section).

The user is responsible for weed control/crop safety issues resulting from the use of tank mixtures not listed on this label.

To select a proper tank mix product, identify the weeds to be controlled and review the product labels to determine which product is needed. Consult the companion tank mix herbicide label for use instructions, application rates, use restrictions and precautions, and other application information. If tank mixing this product with a glyphosate product, substitute 0.25% NIS for the 1% COC.

2,4-D (LVE) is the isooctyl (2-ethylhexyl) ester of 2,4-Dichlorophenoxyacetic acid, that is sold under a variety of trade names. 2,4-D has a minimum pre-plant interval of 7 - 30 days based on the application rate. Consult the specific 2,4-D product label for details on this interval.

# **Tank Mix Compatibility Testing**

Perform a jar test to ensure that this product is compatible with other pesticides. Use a clear, quart-sized, glass jar with a secure lid. Mix the tank mix ingredients in relative proportions. Invert the jar containing the mixture several times and observe for approximately 30 minutes. The mixture is not compatible if it balls-up, forms flakes, sludges, gels, oily film or layers, or other precipitates.

#### **Fall Application Instructions**

Apply this product to no-till or conservation fields any time after fall harvest.

#### Timing: Burndown

Apply to annual broadleaf weeds up to 3" tall and to perennial broadleaf weeds that are up to 6" tall. Apply to annual grasses that are no taller than 1". Where application rate is not restricted by soil pH, use the higher rate within the specified rate range for optimum control and longer residual control.

#### Rate Table A. Fall or Early Spring Use Rates by Region

Application Rates in Medium and Fine Soils with 1½ - 4% Organic Matter	Rate*
Central Region States	
- No pH restriction	2.25 oz./Acre <sup>1</sup>
- pH <7	3 - 7 oz./Acre <sup>2</sup>
Southern Region States	
- No pH restriction	2.25 - 3.5 oz./Acre <sup>1</sup>
- pH <u>&lt;</u> 7	>3.5 - 7 oz./Acre <sup>2</sup>

\*See Geographic Use Regions for state specific restrictions for Alabama, Iowa, Michigan, Mississippi, Missouri, Nebraska, New York, Texas, and Wisconsin.

<sup>1</sup>2.25 oz. of product/Acre = 0.09 lb. a.i. metribuzin/Acre and 0.015 lb. a.i. chlorimuron/Acre

<sup>2</sup>3 – 7 oz. of product/Acre = 0.12 – 0.28 lb. a.i. metribuzin/Acre and 0.02 – 0.05 lb. a.i. chlorimuron/Acre

#### Burndown Control of Emerged Winter Annual/Perennial and Summer Annual Weeds

Apply 2.25 - 7 oz./Acre (0.09 – 0.28 lb. a.i. metribuzin/Acre and 0.015 – 0.05 lb. a.i. chlorimuron/Acre) to burndown the following weeds. Optimum burndown results by adding 2,4-D LVE and is required to control certain weeds.

Annual grasses	Pepperweed, Virginia
Bittercress, small-flowered	Pigweed, redroot
Bushy wallflower	Ragweed, common
Buttercup, smallflower	Ragweed, giant
Butterweed (Cressleaf groundsel)	Shepherd's purse
Dandelion	Smartweed, Pennsylvania
Deadnettle, purple	Speedwell, field, purslane
Garlic, wild*	Sunflower
Henbits	Thistle, Canada (above ground portion)
Ladysthumb	Velvetleaf
Lambsquarters*	Whitlowgrass
Lettuce, prickly	Yellow rocket
Marestail (horseweed)*	
Mustard, tansy, wild	
Pennycress, field	

\*Add 8 oz. a.i./Acre 2,4-D LVE for all rates.

Refer to the "Burndown Applications", "SPRAY ADDITIVES", and "Tank Mixes" sections for adjuvant and gallonage requirements for burndown applications.

#### Chickweed Burndown

- For optimum control, add 0.1 0.33 oz. DuPont<sup>™</sup> Express<sup>®</sup> XP herbicide, or any tribenuron-methyl-containing product, to this product to control common chickweed up to 6" tall.
- For heavy infestations, use the higher rate within the specified rate range. For light infestations, use the lower rate within the specified rate range.
- Tribenuron-methyl-containing product must be added at least 45 days before soybean planting.
- Metribuzin or glyphosate-containing products registered for soybeans can be used for chickweed burndown as an alternative to tribenuron-methyl.

#### **Pre-Emergence or Residual Control**

Apply 2.25 oz./Acre (0.09 lb. a.i. metribuzin/Acre and 0.015 lb. a.i. chlorimuron/Acre) of this product in the fall through early spring to achieve limited residual control of listed weeds.

Apply 3 - 7 oz./Acre (0.12 – 0.28 lb. a.i. metribuzin/Acre and 0.02 – 0.05 lb. a.i. chlorimuron/Acre)of this product in the fall through early spring pre-emergence to control or suppress the following weeds through normal planting dates:

Weeds Controlled	Weeds Suppressed
Cocklebur	Annual grasses* (Foxtails, Barnyardgrass, Crabgrass,
Henbit	Panicum)
Ladysthumb	Chickweed, common
Lambsquarters	Jimsonweed
Marestail	Morningglory, annual*
Mustards, winter annual (pennycress, bittercress,	Nutsedge, yellow*
Shepherd's purse, whitlow grass, yellow rocket)	Prickly Sida (teaweed)*
Pigweeds, redroot, smooth	Ragweed, giant*
Purslane, Speedwell	Velvetleaf
Ragweed, common	
Smartweed, Pennsylvania	

\*2.25 oz./Acre applications of this product in heavy weed pressure, delayed planting, and/or adverse environmental conditions may require additional burndown control measures at planting.

# SPRING APPLICATIONS

- This product can be applied alone or in tank mix using any of the following application methods:
- Early pre-plant or pre-plant in conservation tillage, no-till or stale seedbed systems.
- Pre-plant incorporated (uniformly incorporated in the top 1" 2" of soil prior to planting soybeans).
- Pre-emergence application.
- Sequential applications followed by planned post-emergence treatments.

#### **Pre-Emergence Weed Control**

This product provides residual control/suppression of the following weed species. Use lower rates within the specified rate range for planned sequential application programs. Use higher rates within the specified rate range for full-season programs. See the rate tables for additional information.

Weed Species	Weed Species
Controlled	Suppressed/Partially Controlled
Cocklebur*	Annual grasses (Barnyardgrass, Broadleaf signalgrass,
Florida Beggarweed	Crabgrass, Foxtail species, Panicum (Texas and Fall))
Hemp sesbania	Burcucumber
Hophornbeam, copperleaf	Chickweed, common
Jimsonweed	Johnsongrass (seedling)
Ladysthumb	Mexicanweed
Lambsquarters	Nutsedge (purple, yellow)
Mustard, wild	
Morningglories* (Entireleaf, Ivyleaf, Pitted,	
Smallflower, Tall)	
Pigweed (Palmer, Redroot, Smooth, Spiny amaranth)	
Poinsettia (wild)	
Prickly sida (teaweed)	
Purslane, common	
Ragweed, common	
Ragweed, giant*	
Sicklepod*	
Smartweed, Pennsylvania	
Spotted spurge	
Sunflower	
Velvetleaf	

\*Large-seeded weeds that germinate deep in the soil (i.e., morningglory, sicklepod, cocklebur, and giant ragweed) and emerge at varying times in the growing season may require cultivation or a post-emergence application for season-long control.

#### **CENTRAL REGION STATES USE DIRECTIONS**

Spring applications of this product can be applied at planting or up to 45 days prior to planting.

#### Rate Table B. Early Pre-Plant, Pre-Plant Burndown, Pre-Plant Incorporated and Pre-Emergence Application Rates

Broadcast Rate (Oz./Acre)* in Soil with ½ - 4% Organic Matter	Soil Texture
4 - 5	Coarse: Loamy sand, Sandy loam
5 - 6	Medium: Loam, Silt loam, Silt, Sandy Clay Loam
5 - 7	Fine: Silty clay loam, Clay Loam, Clay

\*4 to 5 oz. of product/Acre = 0.16 to 0.20 lb. a.i. metribuzin/Acre and 0.027 to 0.033 lb. a.i. chlorimuron/Acre

5 to 6 oz. of product/Acre = 0.20 to 0.24 lb. a.i. metribuzin/Acre and 0.033 to 0.04 lb. a.i. chlorimuron/Acre

5 to 7 oz. of product/Acre = 0.20 to 0.28 lb. a.i. metribuzin/Acre and 0.033 to 0.05 lb. a.i. chlorimuron/Acre

#### **Grass Control in Central Region States**

For optimum season-long pre-emergence control of grasses: Tank mix this product with other grass herbicides such as metolachlor, alachlor, or pendimethalin.

Make a post-emergent application of a grass herbicide such as Se-CURE EC, DuPont Assure<sup>®</sup> II herbicide, or, if soybeans are glyphosate-tolerant, follow up with an in-season glyphosate application.

#### **Pre-Plant Burndown Applications in Central Region States**

This product will provide burndown control of the following weeds up to 3" diameter/height, and controls annual grasses up to 1" tall.

Annual grasses	Mustard, wild, tansy
Bittercress, small-flowered	Pennycress, field
Bushy wallflower	Pepperweed, Virginia
Buttercup, smallflower	Pigweed (Redroot)
Butterweed (Cressleaf groundsel)	Ragweed (common, giant)
Dandelion	Shepherd's purse
Deadnettle, purple	Smartweed, Pennsylvania
Garlic, wild*	Speedwell, purslane
Henbit	Sunflower
Ladysthumb	Thistle, Canada (above ground portion)
Lambsquarters*	Velvetleaf
Lettuce, prickly	Whitlowgrass
Marestail (horseweed)	Yellow rocket

\*Add 8 oz. a.i./Acre 2,4-D LVE for all rates.

For spring burndown control, select the appropriate rate from Rate Tables B or C.

For burndown control of broadleaf weeds taller than 1 - 3" or for burndown control of larger annual grasses or weeds NOT listed, tank mix this product with one or more of the following products: Se-CURE EC or ASSURE<sup>®</sup> II, glyphosate, paraquat, or 2,4-D (LVE).

For adjuvant and gallonage requirements for burndown applications, see the "Burndown Applications", "SPRAY ADDITIVES", and "Tank Mixes" sections of this label.

#### Tank Mixes with Metribuzin or DuPont<sup>™</sup> Linex<sup>®</sup>4L – Central Region States

Apply this product at reduced rates if tank-mixing with metribuzin or metribuzin-containing products. This tank-mix combination will provide season-long pre-emergence weed control for the following weeds:

Ladysthumb	Ragweed, common
Lambsquarters	Smartweed, Pennsylvania
Mustard, wild	Velvetleaf
Pigweed (Palmer, Redroot, Smooth, Spiny amaranth)	

This tank-mix combination will suppress pre-emergence of the following weeds:

Cocklebur	Jimsonweed	
Crabgrass	Morningglories (Entireleaf, Ivyleaf, Pitted, Tall)	
Eastern black nightshade*	Waterhemp*	
Foxtail		

\*Partial control if tank mixed with 1 pint of Linex<sup>®</sup> 4L.

Choose a reduced rate of this product and a rate of metribuzin from the rate table below.

#### Rate Table C. Tank mixes of this product with metribuzin or Linex<sup>®</sup> 4L

Broadcast Rate (/Acre) in Soil with ½ - 4% Organic Matter (This product + metribuzin)	Soil Texture
2.25* - 4 oz. 1.5 - 3 oz. Al 1 - 1.5 pts.	Coarse: Loamy sand, Sandy loam
2.25* - 4 oz. 3 - 4.5 oz. Al 1 - 2 pts.	Medium: Loam, Silt Ioam, Silt, Sandy Clay Loam Fine: Silty clay Ioam, Clay Loam, Clay

\*2.25 oz./Acre is the maximum application rate on soil with composite pH >7.0.

#### **Sequential Applications in Central Region States**

Reduced rates of 2.25 - 7 oz./Acre (0.09 – 0.28 lb. a.i. metribuzin/Acre and 0.015 – 0.05 lb. a.i. chlorimuron/Acre) of this product can be followed by sequential application of several post-emergence herbicides (if needed) such as DuPont<sup>™</sup> Classic<sup>®</sup> or Synchrony<sup>®</sup> XP, Harmony<sup>®</sup> GT XP. The reduced rates in Table D will provide early-season residual control of weeds listed in the "Weeds Controlled-Pre-Emergence Spring Application".

Sharda Chlorimuron + Metribuzin WDG (Broadcast application Oz./Acre) <sup>1</sup>	Sequential rate limits for DuPont <sup>™</sup> Classic <sup>®</sup> or Synchrony <sup>®</sup> XP (Oz./Acre)
2.25*	Do not follow application with any chlorimuron-ethyl
(*maximum rate on soil with composite pH >7.0)	containing product on soils with composite pH >7.0.
3 - 5	Classic <sup>®</sup> or Synchrony <sup>®</sup> XP up to 0.75 oz.
6	Classic <sup>®</sup> up to 0.66 oz. or Synchrony <sup>®</sup> XP up to 0.75 oz.
7	Classic <sup>®</sup> up to 0.25 oz.

<sup>1</sup>2.25 oz. of product/Acre = 0.09 lb. a.i. metribuzin/Acre and 0.02 lb. a.i. chlorimuron/Acre

3 to 5 oz. of product/Acre = 0.12 to 0.20 lb. a.i. metribuzin/Acre and 0.02 to 0.033 lb. a.i. chlorimuron/Acre

6 oz. of product/Acre = 0.24 lb. a.i. metribuzin/Acre and 0.04 lb. a.i. chlorimuron/Acre

7 oz. of product/Acre = 0.28 lb. a.i. metribuzin/Acre and 0.05 lb. a.i. chlorimuron/Acre

#### Rotational Information – Fall and Spring Applications – Central Region States

#### Central Region includes states of:

Delaware, Illinois, Indiana, Iowa (fields East of SR 63 or south of I-80), Kansas, Maryland, Michigan, Missouri (except the Bootheel), Nebraska (fields south of Route 30 and east of Route 281), New Jersey, New York (fields south of I-90), Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin (fields south of I-90 between Lacrosse and Madison and fields south of I-94 between Madison and Milwaukee).

When used according to the application instructions for central region states, **"Rotational Guideline 1**" describes the minimum length of time (in months) from the time of application of this product until soil treated with this product can be replanted to crops listed in the table. For fall applications, count the re-cropping interval from the normal Spring planting time for soybeans in your geographic area.

Crop rotation intervals listed are based on crops growing in favorable conditions. Crops growing under stress due to unfavorable environmental conditions (drought, nutrient deficiency, high salts, disease and insect pressure) may demonstrate reduced tolerance to crop protection chemicals. When deciding on a particular crop to replant, carefully consider the soil and field conditions. If a specified tank mix is used, consult the tank-mix partner label for recropping instructions and follow the most restrictive directions.

For all Fall and Spring Applications of this product, including sequential applications of Canopy<sup>®</sup> EX, Classic<sup>®</sup>, or Synchrony<sup>®</sup> XP, follow the re-cropping intervals listed below:

Сгор	Re-Cropping Interval (Months)
Soybeans	Anytime
Barley, Ryegrass, Wheat, Winter Rye	4
Alfalfa, Cotton, Field Corn*, Tobacco transplants, Tomato transplants	10
Clover, Dry Beans, Kidney Beans, Peas, Rice, Snap Beans, Sorghum	12
Cabbage, Canola, Cucumber, Flax, Lentils, Mustard, Peanuts, Pumpkin, Sunflower, Sweet Corn, Watermelon	18
Carrot, Onion, Potato, Sugar beets, and any other crop not listed	30

\*Field Corn is defined to include only that corn grown for grain, silage, popcorn, and seed corn. However, because seed corn inbred lines may vary in their sensitivity to trace amounts of herbicide carryover, Sharda USA LLC cannot warrant that seed corn can be recropped without damage or yield loss. Users should seek the advice of their seed corn company agronomists regarding inbred sensitivity to herbicides prior to planting any inbred lines.

# SOUTHERN REGION STATES USE DIRECTIONS

Spring applications of this product can be applied at planting or up to 45 days prior to planting. Apply this product Early pre-plant, Pre-plant incorporated, or Pre-emergence as directed in the rate table below.

Broadcast Rate	e (Oz./Acre) <sup>1</sup> in	Soil Texture
½ - 3% Organic Matter in Soil*	3 - 5% Organic Matter in Soil*	
6	8	Coarse: Loamy sand, Sandy loam
8	10	Medium: Loam, Silt loam, Silt, Sandy Clay Loam
10	12	Fine: Silty clay loam, Clay Loam, Clay

\*Use 6 - 8 oz. on silt loam soils (medium texture) in TN and KY.

 $^{1}$ 6 oz. of product/Acre = 0.24 lb. a.i. metribuzin/Acre and 0.04 lb. a.i. chlorimuron/Acre

8 oz. of product/Acre = 0.32 lb. a.i. metribuzin/Acre and 0.054 lb. a.i. chlorimuron/Acre

10 oz. of product/Acre = 0.40 lb. a.i. metribuzin/Acre and 0.067 lb. a.i. chlorimuron/Acre

12 oz. of product/Acre = 0.48 lb. a.i. metribuzin/Acre and 0.08 lb. a.i. chlorimuron/Acre

# **Grass Control in Southern Region States**

For optimum season-long pre-emergence control of grasses:

Tank mix this product with other grass herbicides such as metolachlor, alachlor, or pendimethalin.

Make a post-emergent application of a grass herbicide such as Se-CURE EC, DuPont Assure<sup>®</sup> II herbicide, or, if soybeans are glyphosate-tolerant, follow up with an in-season glyphosate application.

# Stale Seedbed/Conservation Tillage Use Directions – Southern Region States

For burndown control of broadleaf weeds and small annual grasses, apply 3 - 4 oz. of this product up to 45 days before planting. Use the 4 oz. rate (0.16 lb. a.i. metribuzin/Acre and 0.027 lb. a.i. chlorimuron/Acre) on larger weeds.

Apply 4 - 12 oz. of this product (0.16 to 0.48 lb. a.i. metribuzin/Acre and 0.027 to 0.08 lb. a.i. chlorimuron/Acre) up to 45 days prior to planting for burndown control plus residual control. Select a rate from Rate Tables D or E, based on the listed soil types.

For burndown control of grasses and/or weeds NOT listed, or for burndown of larger weeds and/or grasses, tank mix this product with either 2,4-D LVE, paraquat, and/or glyphosate.

For adjuvant and gallonage requirements for burndown applications, refer to the "Burndown Applications", "SPRAY ADDITIVES", and "Tank Mixes" sections of this label.

# **Sequential Applications in Southern Region States**

Reduced rates of this product can be followed by one post-emergence treatment with herbicides such as DuPont<sup>™</sup> Classic<sup>®</sup> or Synchrony<sup>®</sup> XP, or DuPont<sup>™</sup> Classic<sup>®</sup> + Harmony<sup>®</sup> GT XP, or by other herbicides registered for use on soybeans. See Table E application rates based on soil type.

# Rate Table E. Sequential Applications of this product followed by Post-Emergence

Broadcast Rate (Oz./Acre) in ½ - 4% Organic Matter	Soil Texture	
3 - 3.5	Any 3.5 oz./Acre is the maximum use rate on soils with composite pH >7.0 If re-cropping to rice the re-crop interval is 18 months.	
4 - 6	Coarse: Loamy sand, Sandy loam	
4 - 6	Medium: Loam, Silt loam, Silt, Sandy Clay Loam	
6 - 8	Fine: Silty clay loam, Clay Loam, Clay	

<sup>1</sup>3 to 3.5 oz. of product/Acre = 0.12 to 0.14 lb. a.i. metribuzin/Acre and 0.02 to 0.023 lb. a.i. chlorimuron/Acre

4 to 6 oz. of product/Acre = 0.16 to 0.24 lb. a.i. metribuzin/Acre and 0.027 to 0.04 lb. a.i. chlorimuron/Acre

6 to 8 oz. of product/Acre = 0.24 to 0.322 lb. a.i. metribuzin/Acre and 0.04 to 0.054 lb. a.i. chlorimuron/Acre

#### Rotational Information – Fall and Spring Applications – Southern Region States

#### Southern Region includes states of:

Alabama (except "Black belt" where soil pH must be <7.0), Arkansas, Florida, Georgia, Kentucky, Louisiana, Missouri (Bootheel region only), Mississippi (except "Black belt" where soil pH must be <7.0), North Carolina, Oklahoma, South Carolina, Tennessee, and Texas (fields east of Route 183).

When used according to the application instructions for southern region states, **"Rotational Guideline 2**" describes the minimum length of time (in months) from the time of application of this product until soil treated with this product can be replanted to crops listed in the table. For Fall applications, count the re-cropping interval from the normal Spring planting time for soybeans in your geographic area.

Crop rotation intervals listed are based on crops growing in favorable conditions. Crops growing under stress due to unfavorable environmental conditions (drought, nutrient deficiency, high salts, disease and insect pressure) may demonstrate reduced tolerance to crop protection chemicals. When deciding on a particular crop to replant, carefully consider the soil and field conditions. If a specified tank mix is used, consult the tank-mix partner label for recropping instructions and follow the most restrictive directions.

For all Fall and Spring Applications of this product, including sequential applications of Canopy<sup>®</sup> EX, Classic<sup>®</sup>, or Synchrony<sup>®</sup> XP, follow the re-cropping intervals listed below:

# **REGIONAL BOUNDARIES TABLE**

Southern Region		
The states of Alabama (except the "Black Belt" where soil pH must be less than 7.0), Arkansas, Florida, Georgia,		
Kentucky, Louisiana, Missouri (Bootheel region only), Mississippi (except the "Black Belt" where soil pH must be less		
than 7.0), North Carolina, Oklahoma, South Carolina, Tennessee, and Texas (fields East of Route 183).		
Defente Course 1 if:		

Refer to Group 1 if:	Refer to Group 2 if:
Composite soil pH >7.0	<ul> <li>Composite soil pH &gt;7.0</li> </ul>
<ul> <li>Max. application rate: 3.5 oz./Acre</li> </ul>	Max. application rate: 3.5 oz./Acre
<ul> <li>No post-emergence applications with DuPont™ Classic<sup>®</sup> or Synchrony<sup>®</sup> XP</li> </ul>	Rate exceeds 10 oz./Acre
	ALL SOUTHERN STATES
ALL SOUTHERN STATES	
If composite Soil pH <7.0:	
States of AL, AR, FL, GA, LA, MS, or TX.	
States of KY, MO Bootheel, NC, OK, SC, TN: Do not exceed 10 oz./Acre.	

Сгор	Crop Rotation Interval (Months)	
	Group 1	Group 2
Soybeans	Anytime	Anytime
Barley, Ryegrass, Wheat, Winter Rye	4	4
Alfalfa	10	18
Clover, Rice <sup>1</sup> , Sorghum,	12	18
Field Corn*	9/10**	18
Cotton	10	18
Peanuts	8	18

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Tobacco (Transplant), Tomato (Transplant)	10	18
Cucumber, Flax, Pumpkins, Sunflower, Sweet Corn, Watermelon, Cabbage, Canola (rapeseed), Lentils, Mustard, Carrots, Onions, Potato, Sugar Beets, any crop not listed	18	30

\*Field Corn is defined to include only that corn grown for grain, silage, popcorn, and seed corn. However, because seed corn inbred lines may vary in their sensitivity to trace amounts of herbicide carryover, Sharda USA LLC cannot warrant that seed corn can be recropped without damage or yield loss. Users should seek the advice of their seed corn company agronomists regarding inbred sensitivity to herbicides prior to planting any inbred lines.

\*\*May be re-cropped to field corn after 9 months if the application rate does not exceed 6 oz./Acre.

<sup>1</sup>The re-crop to rice is 18 months after 3 - 3.5 oz./Acre is used on soils with composite pH >7.0.

#### **APPLICATION EQUIPMENT**

Spray equipment must be clean and free of pesticide deposits before applying this product.

Follow the spray tank cleaning procedures specified on the label of the previously applied product. If there are no cleaning procedures provided, follow the following cleaning procedures before making any application with this product:

- 1. Rinse sprayer, tank, boom, and hoses thoroughly with clean water.
- 2. Partially fill tank with clean water and add one of the cleaning agents listed in the "SPRAYER CLEANUP" section.
- 3. Completely fill the tank and flush the cleaning agent through the boom and hoses.
- 4. Let stand for 15 minutes with continuous agitation/recirculation.
- 5. Drain the tank and follow the label directions of the previously sprayed product for rinsate disposal.
- 6. Thoroughly rinse sprayer, tanks boom, and hoses with clean water.

If multiple applications are to be made over an extended period of time, partially fill the tank with clean water at the end of each day, flush the boom and hoses, and allow the equipment to sit overnight.

Steam clean aerial spray tanks to remove any visible pesticide deposits.

#### **APPLICATION EQUIPMENT/SPRAY VOLUMES**

Ground Application – Conventional Tillage	Ground Application – Conservation Tillage – Burndown	Aerial Application
<ul> <li>Use a minimum of 10 gallons water/Acre.</li> <li>Select nozzle and pressure combinations that deliver coarse to very coarse spray droplets (i.e., those indicated by ASABE standard S-572.1).</li> </ul>	<ul> <li>Use a minimum of 15 gallons water/Acre.</li> <li>Increase the gallonage for small weeds and heavy crop residues.</li> <li>Select nozzle and pressure combinations that deliver medium spray droplets (i.e., those indicated by ASABE standard S-572.1).</li> </ul>	<ul> <li>Apply early pre-plant, pre-plant incorporated, or pre-emergence.</li> <li>Make uniform applications with properly calibrated equipment.</li> <li>Apply with a minimum of 2 gallons water/Acre.</li> <li>Ensure continuous agitation of spray tank.</li> <li>Do not overlap applications.</li> </ul>

#### MIXING INSTRUCTIONS

- 1. Fill tank ¼ full with water.
- 2. Begin agitation.
- 3. Add this product.
- 4. Add each additional component of any tank mix separately while adding water.
- 5. Maintain continuous agitation.
- 6. If mixing is poor with any component, pre-mix the component with 2 parts water before adding to the spray tank.

# **Adding Fertilizer**

Fertilizer solutions can be used with this spray mixture. Mix a small portion to ensure compatibility before full-scale mixing. Check for compatibility by:

- 1. Put 1 pint fertilizer solution in a quart size jar.
- 2. Mix 2 teaspoons of this product with 2 tablespoons water; mix thoroughly, then add the fertilizer solution.
- 3. Close jar and shake well.

- 4. If other herbicides are being added to the mixture, pre-mix 2 teaspoons of wettable powder or 1 teaspoon liquid with 2 tablespoons of water, then add this product/fertilizer solution.
- 5. Close jar and shake well.
- 6. Observe the mixture for several seconds, then again after 30 minutes.
- 7. If mixture does not separate, foam, gel, or lump, it is compatible and can be used.
- 8. Mixing ability can be improved by adding compatibility agents.

If the mixture proves compatible, prepare the tank mixture as follows:

- 1. Add the fertilizer solution first.
- 2. Maintain continuous agitation.
- 3. Add the required amount of this product and mix thoroughly.
- 4. For tank mixtures with other herbicides, follow the directions listed above and follow all applicable directions, restrictions, and precautions of the additional herbicide products.

Use this product's spray preparation the same day as mixed to avoid product degradation. If the product settles, thoroughly reagitate and remix before applying. If tank mixing with other herbicides, follow all applicable directions, restrictions, and precautions of the additional herbicide products.

# SPRAYER CLEANUP

Clean all application equipment thoroughly immediately after application to ensure ease of cleanup and avoid crop injury to crops sprayed subsequently. Clean equipment as follows:

- 1. Drain spray equipment and rinse sprayer, flush hoses, boom and nozzles thoroughly with clean water. Be sure to loosen and remove visible deposits.
- 2. Fill the sprayer with clean water and add household ammonia (one gallon of 3% active for every 100 gallons of water). Flush hoses, boom and nozzles. Turn off the boom and top off the tank with clean water. Circulate through the spraying system for 15 minutes. Flush the hoses, boom and nozzles with the cleaning solution. Drain the tank.
- 3. Remove and clean nozzle, screens and strainers in a bucket of fresh water.
- 4. Repeat 2.
- 5. Rinse the sprayer, hoses, boom and nozzles thoroughly with clean water, several times. Clean all other associated application equipment. Take necessary safety precautions when cleaning equipment. Do not clean equipment near wells, water sources or near desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

# PH Variations in Soil

pH levels in soil vary, even in the same field. It is not uncommon for pH to vary as much as 2 pH units in different areas of the same field. Composite soil samples do not always detect areas where pH is high. Sharda USA LLC suggests subsampling soil to identify areas that may have pH values higher than the field average.

The following areas of a field are likely to test with higher pH levels. Subsampling may be beneficial in:

- Areas where soil type variations are evident within a field, take separate soil samples.
- Areas where conditions vary within a field, such as: Areas bordered by limestone gravel, river bottoms subject to flooding, low areas in hardpan soils where evaporative ponds may exist, eroded hillsides, along drain tile lines, and areas where drainage ditch spoil has been spread.
- Areas where lime has not been deeply incorporated, soil may exhibit higher pH values in the top 3" of soil. Composite soil samples taken 6" - 8" deep may not reflect the elevated pH in the top 3". In these cases shallow sampling of the upper 3" inches is recommended.

Determine soil pH by laboratory analysis using a 1:1 soil:water suspension.

# STORAGE AND DISPOSAL

**PESTICIDE STORAGE** Store product in original container only. Do not contaminate water, other pesticides, fertilizer, food or feed in storage.

**PESTICIDE DISPOSAL:** Do not contaminate water, food, or feed by disposal. Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

# CONTAINER HANDLING: Refer to the Net Contents section of this product's labeling for the applicable "Nonrefillable Container" or "Refillable Container" designation.

Nonrefillable Plastic and Metal Containers (Capacity Equal to or Less Than 50 Pounds):

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. 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. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate, or puncture and dispose of in a sanitary landfill, or by State and local authorities.

**Refillable Containers:** Refillable container. Refilling Container: Refill this container with this product containing chlorimuron ethyl and metribuzin only. Do not reuse this container for any other purpose. Cleaning before refilling is the responsibility of the refiller. Prior to refilling, inspect carefully for damage such as cracks, punctures, abrasions, worn out threads and closure devices. If damage is found, do not use the container. Check for leaks after refilling and before transporting. If leaks are found, do not reuse or transport container. **Disposing of Container**: Do not reuse this container for any other purpose other than refilling (see preceding). Cleaning the container before final disposal is the responsibility of the person disposing of the container. To clean the container before final disposal, use the following pressure rinsing procedure. Insert a lance fitted with a suitable tank cleaning nozzle into the container and ensure that the water spray thoroughly covers the top, bottom and all sides inside the container. The nozzle manufacturer generally provides instructions for the appropriate spray pressure, spray duration and/or spray volume. If the manufacturer's instructions are not available, pressure rinse the container for at least 60 seconds using a minimum pressure of 30 PSI with a minimum rinse volume of 10% of the container volume. Drain, pour or pump rinsate into application equipment or rinsate collection system. Repeat this pressure rinsing procedure two more times. Then, for Plastic Containers, offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration. Do not burn, unless allowed by State and local ordinances. For Metal Containers, offer for recycling if available or reconditioning if appropriate or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

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